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Wallowa-Whitman National Forest Land and Resource Management Plan

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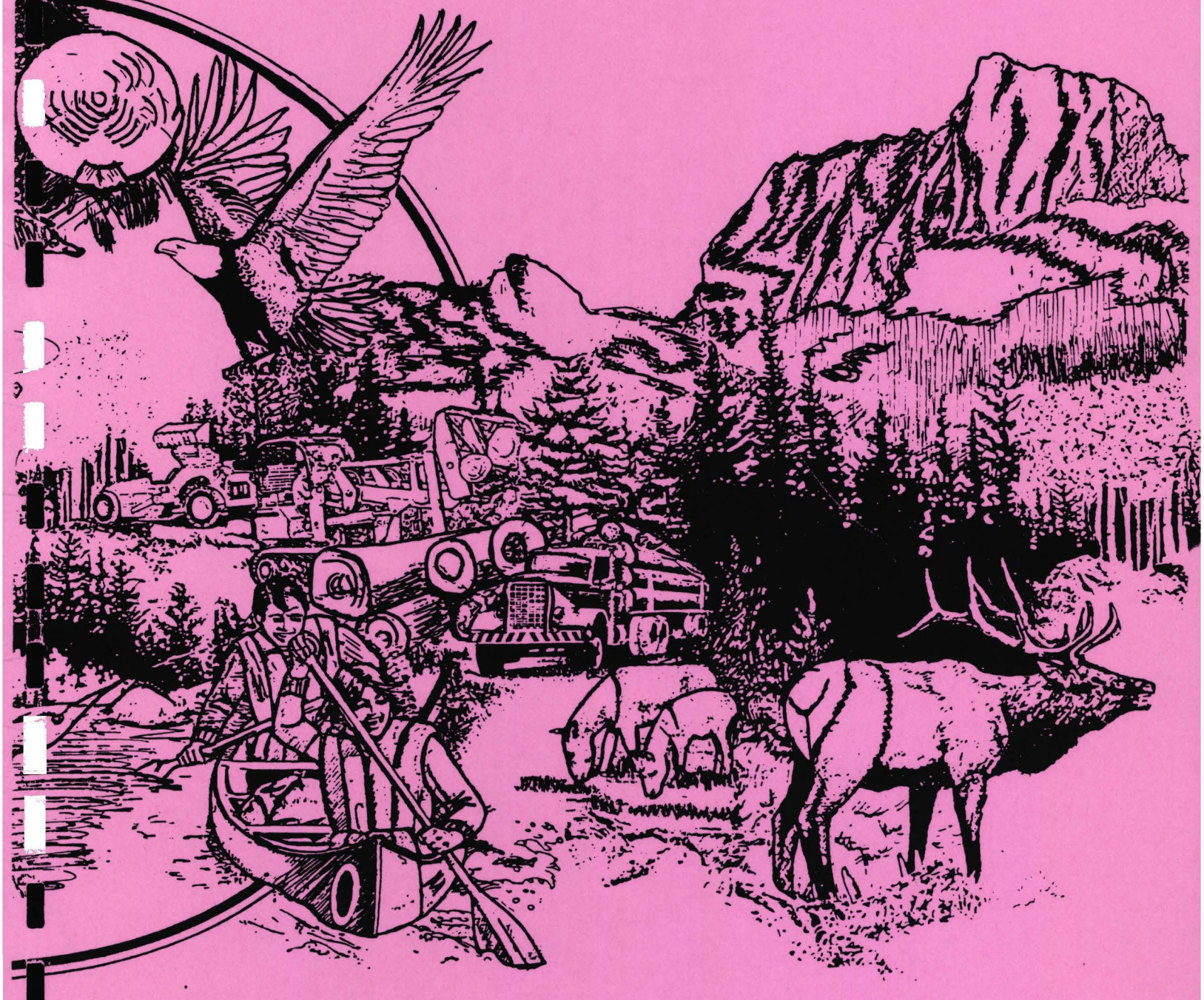
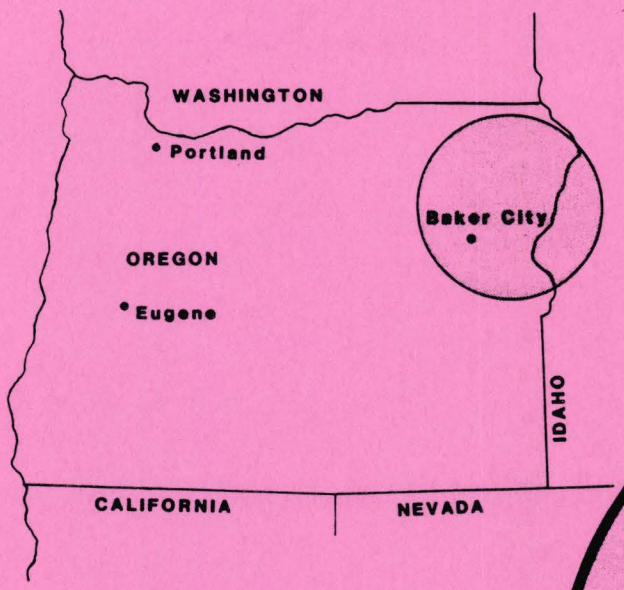
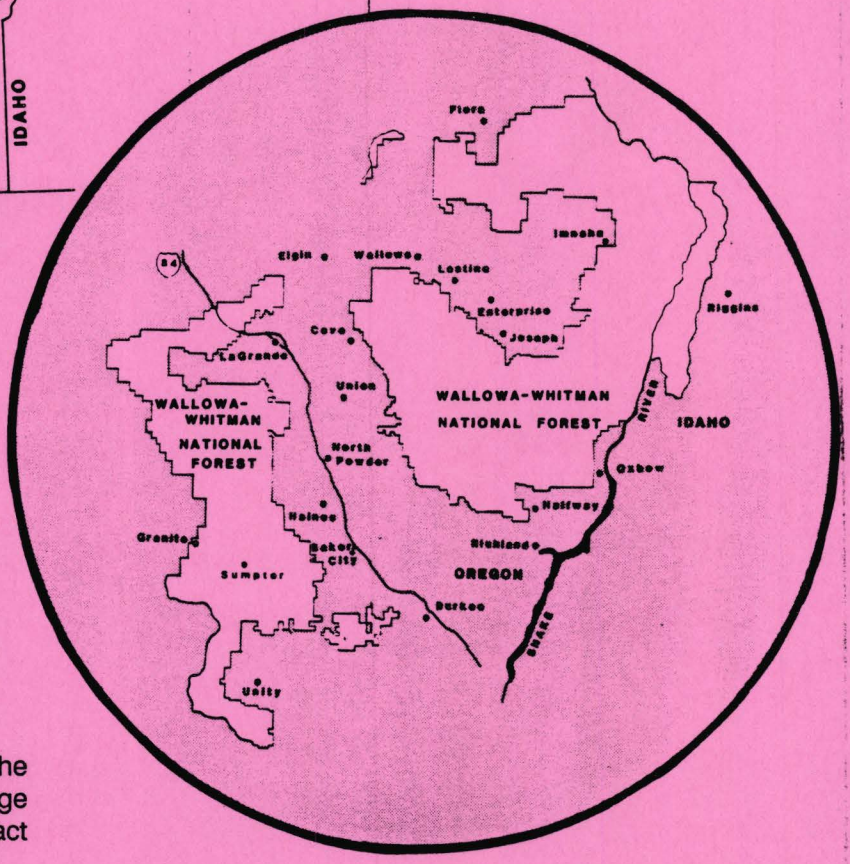
Monitoring and Evaluation Report: 1996







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Reply to: 1920 Land and Resource Planning

Date: August 13, 1997

Subject: FY 96 Monitoring and Evaluation Report

To: Interested Parties

Enclosed is the fiscal year 1996 Monitoring and Evaluation Report for the Wallowa-Whitman National Forest's Land and Resource Management Plan.

WILLIAM R. GAST, JR.
Acting Forest Supervisor

Enclosure

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1. INTRODUCTION

The Forest Plan (Land and Resource Management Plan) for the Wallowa-Whitman National Forest was approved by the Regional Forester on April 23, 1990. The Forest Plan specifies how areas of the Forest are to be managed and which resources are to be emphasized, sets standards and guidelines for management, establishes projected levels of goods and services, and specifies monitoring requirements.

Monitoring takes place to determine if the Forest Plan is being implemented as intended, to measure effectiveness of the implementation in achieving the desired future condition, and to verify that assumptions made during the planning process are still valid. Monitoring results are evaluated to determine if changes are needed in management practices or if a Forest Plan adjustment is indicated.

This report summarizes results of Forest Plan monitoring and evaluation for fiscal year 1996 (October 1, 1995 to September 30, 1996). All references to years indicate fiscal years.

The purpose of this report is to provide information to the agency and the public about how well Forest Plan objectives are being met. The Forest Supervisor will use this report in conjunction with the 1991-1995 reports to determine whether conditions or demands have changed significantly.

The 1996 monitoring results continue to validate the indications reported in the 1991 through 1995 monitoring and evaluation reports that conditions and interrelationships between resource objectives and commodity outputs have changed from those originally projected in the Forest Plan. Environmental consequences may also be different because the rate of implementation of the Forest Plan is different than planned for certain monitoring items.

The Forest Service has begun adjustment processes for forest plans throughout the Pacific Northwest Region. Project-specific analyses and decisions will continue to amend forest plans in order to meet new Regional standards for ecosystem management and Regional Forester's Amendment 2, which was developed to ensure consistency with National Forest Management Act viability for old-growth associated species. Programmatic and project-specific decisions may result in amendments to the Forest Plan.

2. SUMMARY OF FINDINGS AND ACTION TO BE TAKEN

The following table provides summaries of monitoring results and action to be taken. A more complete discussion of monitoring results, analysis, and the actions to be taken is discussed in Chapter 4 of this document. Action to be taken is described in the following paragraphs:

Note: Acronyms used in this summary are spelled out at their first appearance in Chapter 4.

Continue to Monitor

Monitoring will continue on all items including those with results within the threshold of variability listed in Chapter V of the Forest Plan or where more than one year of data is needed to evaluate results.

Change Management Practices

Results exceeded the threshold of variability for a particular question, and evaluation of the situation indicated the need to change practices or procedures to comply with the Forest Plan.

Further Evaluation

Results may or may not have exceeded the threshold of variability, but additional information or evaluation is needed to better identify the cause of the concern and/or to determine future actions.

Propose Forest Plan Adjustment

Results were inconsistent with the Forest Plan, or the Forest Plan direction was not clear. The follow-up action is changing or clarifying the Forest Plan through the amendment or revision process.

Summary of Findings and Action to be Taken	Continue to Monitor	Change Management Practices	Further Evaluation	Propose Forest Plan Adjustment
Item 1, Compliance with NEPA: NEPA analysis was found to be adequate. The cumulative effect of activities at the Forest level and Blue Mountain provincial level continues to be a major concern.	X	X	X	
Item 2, Forest Plan Standards and Guidelines (S&Gs): S&G lists were completed for pre-project reviews but were not analyzed or summarized as they had been in past years. Resource specialists reviewed the check lists and reported any inconsistencies.	X	X		
Item 3, Insect and Disease Management: Western spruce budworm and Douglas-fir tussock moth populations remain low. More recent trends of bark beetles in the drier pine community types indicate that overstocked ponderosa pine stands have become more susceptible to bark beetles in recent years.	X		X	X
Item 4, Timber Offered for Sale: The Forest was not budgeted for the TPSQ or ASQ volume in the Forest Plan. The volume offered for sale in 1996 was 96% of the assigned target.	X		X	X

Summary of Findings and Actions to be Taken	Continue to Monitor	Change Management Practices	Further Evaluation	Propose Forest Plan Adjustment
Item 5, Silvicultural Harvest Methods: Timber sale cutting units covered 14,429 acres, 59% of the acreage assumed in the Forest Plan. A shift away from regeneration harvesting and an increase in salvage harvesting has created a substantial reduction in volume offered for sale. A number of assumptions in the Forest Plan are no longer valid for a variety of reasons.	X		X	X
Item 6, Precommercial Thinning: Accomplishment in 1996 was 73% of the Forest Plan TSI goal (5,379 acres). The decadal average accomplishment is 78% of the Forest Plan, lower than the threshold of variability. 8,600 acres could have been treated if the program had been fully funded.	X			
Item 7, Harvest Units: Forest Plan S&Gs for size and dispersal of created openings and state of vegetation are being appropriately implemented.	X			
Item 8, Reforestation: Reforestation accomplishment is 93% of the Forest Plan goal. First year survival was 75%; the Forest Plan goal is 80%. Third year survival has dropped from 72% in 1994 to 49% in 1996.	X		X	
Item 9, Lands not Suitable for Timber Management: The EVG layer has been installed in GIS; an extensive update is currently being conducted across the Forest. Direction has been issued to field crews to aid in identifying and recording land suitability.	X		X	
Item 10, Vegetation Management: Herbicide use has increased and fire activities have decreased from 1992 through 1996. Acres treated in 1996 totaled 8,974 acres.	X			
Item 11, Transportation Planning: Progress is being made toward meeting open road density guidelines. However, progress is slow and effectiveness of road closures is 50% or lower in some areas. Most road closures have been accomplished with earth berms.	X	X	X	X
Item 12, Range Outputs: There were 157,702 AUMs under term grazing permits and an additional 13,860 AUMs under term private land permits. This level of permitted grazing is within the threshold set in the Forest Plan.	X			
Item 13, Forage Utilization: Of the monitored pastures, 91% met Forest Plan utilization standards, 9% did not meet standards, and 1% were monitored but not sufficiently to guarantee that standards were met. The threshold of variability was not exceeded.	X		X	
Item 14, Range Vegetation Conditions: Of the area analyzed (321,190 acres), 96% meets Forest Plan standards. The current pace of analysis is inadequate to ensure up-to-date allotment management planning.	X			

Summary of Findings and Actions to be Taken	Continue to Monitor	Change Management Practices	Further Evaluation	Propose Forest Plan Adjustment
Item 15, Range Improvements: 89 structures and 155 acres of nonstructural improvements were accomplished. Targets were met.	X			
Item 16, Allotment Management Planning: In 1995, national priorities changed from AMPs to NEPA decisions and resulted in a hold on AMP efforts; the Rescission Bill of 1995 mandated a return to the AMP/NEPA emphasis. Because of the significant changes in priorities, only two NEPA documents for AMPs were completed. Twenty-seven allotments are currently in some stage of planning process. The threshold has been exceeded.	X	X	X	X
Item 17, Noxious Weeds: The Forest treated 574 acres of noxious weeds, mostly by manual or chemical methods, but some with biological treatments.	X			
Item 18, Watershed Standards, Guidelines, and Best Management Practices: Monitoring took place at three levels--the planning phase, during contract administration, and at post-project reviews. Corrective action was taken where standards and guidelines were not being met, or best management practices were being improperly implemented.	X			
Item 19, Riparian Cumulative Effects: This monitoring item requires long-term projects which collect base line and trend data. Two Districts began, or are continuing, 18 long-term monitoring projects.	X			
Item 20, Peakflows/Lowflows: All projects were designed and planned to be within desired ranges of variability. No specific low flow or peak flow studies were conducted in 1996. Permanent stream channel cross section transects have been established on a number of streams to monitor long-term trends in channel conditions.	X			
Item 21, Soil Productivity: Level 1 and 2 monitoring took place, but no Level 3 monitoring was reported. The Forest Plan and Regional soil productivity protection standards need to be re-written to make monitoring easier and more economical.	X	X		
Item 22, Air Quality: This was the second year for implementation of the memorandum of understanding between Oregon Department of Forestry, Region 6, and DEQ for an innovative and effective air quality monitoring program. Nephelometer readings demonstrated that no significant intrusions occurred at any tested sites during the spring burning season. Visibility is the only AQRV currently being monitored for Clean Air Act and Forest Plan compliance.	X			

Summary of Findings and Actions to be Taken	Continue to Monitor	Change Management Practices	Further Evaluation	Propose Forest Plan Adjustment
Item 23, Fisheries Habitat: A total of 254 acres of riparian habitat were planted. Fifteen stream structures were repaired. Monitoring of 677 stream structures found 432 functioning properly, 207 partially functioning, and 38 nonfunctional. The Forest surveyed 130 miles of stream habitat. On the southern end of the Forest, 37.6 miles of stream habitat was electrofished, primarily to assess bull trout distribution and abundance.	X			
Item 24, Anadromous Fisheries Consultation: No adverse effects to habitat or PET species occurred as a result of timber sales or river craft on the Snake River. Monitoring of 254 active livestock pastures in the area of critical habitat for Snake River chinook salmon indicated that 238 of the pastures met NMFS consultation standards, nine pastures did not meet standards, and the results were uncertain on six pastures (95% compliance rate).	X			
Item 25, Columbia River Basin Anadromous Fish Habitat Management Policy: Desired future conditions for 90% of the Columbia River basin stream systems have been established. Stream inventory required by the PIG is approximately 95% complete. There were 54 biological evaluations written to insure PACFISH standards were met, and 22 written to insure INFISH standards were met.	X			
Item 26, Salmon Summit Action Plan Commitments: No easements were acquired in 1996. A mining site that threatened the Upper Grande Ronde River spring/summer chinook habitat and population was evaluated and consulted on with NMFS prior to removal of extensive overburden that threatened to slide into the area used by salmon. The Forest has completed an inventory of existing diversions requiring screens.	X			
Item 27, Old Growth: Since only about 28% of the designated old-growth meets the Forest Plan definition and replacement stands are not readily available, management requirements for old-growth are not being met. Results indicate the threshold of variability has been greatly exceeded.	X		X	X
Item 28, Dead and Defective Tree Habitat and Primary Cavity Excavators: Of approximately 13,500 acres surveyed on 11 timber sales, 9,000 acres met the 100% potential population levels for snag retention. The threshold of variability is exceeded on timber sales with inadequate K-V funding to mitigate deficiencies.	X	X	X	X
Item 29, Pileated Woodpecker: Sampling for pileated woodpecker populations levels was not funded and did not occur. There were no nest surveys or monitoring to determine trend. If pileated woodpeckers are going to continue to be used as management indicators, habitat and population monitoring need to be done.	X		X	

Summary of Findings and Actions to be Taken	Continue to Monitor	Change Management Practices	Further Evaluation	Propose Forest Plan Adjustment
Item 30, Goshawk Populations: Surveys of goshawk nests were conducted on all Districts. A total of 19 nest sites were surveyed for goshawk occupancy. Eight were active. Fifteen young were fledged, for 1.8 per active nest. Monitoring is inadequate to address the threshold of variability.	X		X	
Item 31, Pine Marten Populations: Because of inadequate funding, only La Grande RD did any pine marten monitoring. They completed winter track surveys in 11 areas on 12 days. A total of 21 marten were detected, all in mature and old-growth successional stages. Available data is inadequate to address monitoring questions.	X			
Item 32, Elk Habitat/Populations: On 12 projects that appeared to have the potential to affect elk HEI, three did not meet the the HEI objective of 0.5. On two projects, HEI was not calculated. Post hunting season elk numbers were 6% over management objectives. Bulls per 100 cows (7) and calves per 100 cows (33) were below the management objectives of 12% and 43%, respectively.	X	X	X	X
Item 33, Bald Eagles: Two active nest sites produced two young. Both sites have approved nest site management plans, but an alternate nest site on one of them is outside the management area. Information on the monitoring of winter roost sites is available from Frank Issacs in his annual report.	X	X		
Item 34, Peregrine Falcons: Five birds were fledged from two nests on the La Grande RD. A nest in the Hells Canyon Wilderness produced one fledgling. Plans have not been completed for any of these nest sites. No active nests were found although 18 potential nest sites were surveyed with cooperative funding from Idaho Power Company.	X			
Item 35, Sensitive Species: Biological evaluations were prepared during project-level planning. Surveys for Townsend's big-earred bats were completed on the HCNRA. Two historical upland sandpiper nest sites were monitored on the La Grande RD; one sandpiper was located. No sensitive plants report was compiled due to higher priority work.	X			
Item 36, MacFarlane's Four-O'Clock: No report was compiled due to higher priority work.	X			
Item 37, Greenman's Lomatium: No report was compiled due to higher priority work.	X			
Item 38, Minerals: All plans of operating involving surface-disturbing operations were monitored. Sporadic and weekend assessment operations were monitored at least once. There were no cases reported in which resource objectives were not met based on this monitoring. Implementation monitoring indicates that are several S&Gs that cannot be met in the short term during placer mining activities.	X		X	X

Summary of Findings and Actions to be Taken	Continue to Monitor	Change Management Practices	Further Evaluation	Propose Forest Plan Adjustment
Item 39, Wilderness: Wildernesses are generally being managed according to management direction and provisions of the Wilderness Act.	X			
Item 40, Wild and Scenic River: Wild and scenic river conditions have not been adversely affected by management activities. Natural processes are dominating. Designated wild and recreational river corridors are being maintained to appropriate classification standards.	X			
Item 41, Recreation Setting: The Forest appears to be providing a wide range of recreation opportunities to the general satisfaction of users. Existing facilities are being managed consistent with ROS, and S&Gs are being met.	X			
Item 42, Off-Road Vehicle (ORV) Use: ORV use is occurring at various levels and in various ways across the Forest. Although use is increasing, it is being managed to meet the intent of the S&Gs outlined in the Forest Plan.	X		X	
Item 43, Visual Resource Objectives: Visual quality objectives appear to be an important and recognized part of project planning on the Forest. Progress is being made in completing viewshed management plans for Level 1 corridors, with about 40% of the 42 Level 1 viewsheds having completed plans.	X			
Item 44, Cultural and Historic Site Protection, Rehabilitation, and Interpretation: No report was compiled due to higher priority work.	X			
Item 45, Budget: The trend of decreasing budgets continues. Forest budget requests appear to have little, if any, effect on allocations from Congress.	X	X	X	
Item 46, Costs and Values: The rolling two-year average for stumpage values of sawtimber sold shows a 7.8 % decrease over Forest Plan projections, which does not exceed the designated threshold of variability of a 25% decrease. The actual annual Forest expenditures for 1994 to 1996 increased 28.6% over Forest Plan projected expenditures for monitored activities.	X	X	X	X
Item 47, Community Effects: Estimated Forest-related jobs are 9% less than projected in the Forest Plan. Personal income derived from Forest-related jobs is estimated to be 19% less than projected. The three-year average of total payments to counties is 80% lower than projected. Tri-county populations have increased 5.4% since 1990. Changes exceed some of the established thresholds.	X		X	X
Item 48, Adjacent Lands: Coordination with adjacent landowners continues to be conducted through project scoping, in compliance with NEPA. This consists of formal and informal contacts about proposed Forest activities that may affect them. The results for these monitoring items are within the threshold of variability.	X		X	X

3. ACCOMPLISHMENTS

This chapter provides a summary of selected accomplishments and resource outputs for the fiscal year.

The following table compares resource outputs and activities projected in the Forest Plan with actual fiscal year 1991-1996 outputs and activities.

RESOURCE OUTPUTS AND ACTIVITIES
COMPARISON OF PROJECTED AND ACTUAL LEVELS

Output/Activity	Unit of Measure	Forest Plan Projected Output/Activity Level	FY 96 Output	FY 91 to 96 Average Output
Timber Harvested by:				
Commercial Thinning	M Acres/Year	3.9	2.6	3.1
Clearcut	M Acres/Year	4.3	0	5.3
Shelterwood	M Acres/Year	8.5	1.2	2.6
Overwood Removal	M Acres/Year	1.2	1.3	1.2
Selection	M Acres/Year	6.5	0	0.7
Sanitation/Salvage	M Acres/Year	0	9.3	4.4
Special Harvest	M Acres/Year	0	0	0
Total		24.4	14.4	12.3
Allowable Sale Quantity Sawlog Volume	Million BF/Year	141	44	35
Unregulated Timber 1/	Million CF/Year		1.0	1.5
Personal Use Fuelwood	Million CF/Year	5.0	1.0	1.5
Reforestation 2/	M Acres/Year			
Planting		4.8	6.1	7.9
Seeding				.02
Site Prep Only		1.7	0.8	1.6
Natural		8.0	6.6	3.8
Total		14.5	13.5	13.3
Timber Stand Improvement	M Acres/Year	7.4	5.4	6.8
Fire Management Effectiveness Index	$/M Protected Acres/Year	1,298	1,391	1,143
Developed Recreation Use	M RVDs/Year	399	771	789
Nonwilderness Dispersed Recreation Use 3/	M RVDs/Year	796	1,013	1,508
Wilderness Use	M RVDs/Year	78	175	193
Trail Construction and Reconstruction	Miles/Year	4	4	16
Developed Recreation Capacity	MPAOT	661	1,861	1,012
Wilderness Management	M Acres	583	583	583
Land Exchange or Transfer	Acres/Year	250	0	2,492
Range Vegetation Management 4/	M Acres	2,307	2,307	2,307
Noxious Weed Control	M Acres/Year	0.400	.574	1.15
Trail Maintenance	Miles	2,250	693	1,356
Land Line Location	Miles/Year	100	21	29.6

RESOURCE OUTPUTS AND ACTIVITIES COMPARISON OF PROJECTED AND ACTUAL LEVELS				
Output/Activity	**Unit of Measure**	**Forest Plan Projected Output/Activity Level**	**FY 96 Output**	**FY 91 to 96 Average Output**
Management Indicator Species 5/				
Pileated Woodpecker	Pairs	346	7/	7/
Goshawk		6/	7/	7/
Primary Cavity Excavators		6/	7/	7/
Resident Trout		6/	7/	7/
Steelhead		6/	7/	7/
Pine Marten	Pairs	6/	7/	7/
Rocky Mountain Elk 8/	M Elk Summering	21.0	23.4	25.0
Fish Habitat Improvement	Acres	250	254	1,098
	Structures	500	19	
Wildlife Habitat Improvement 9/				
Non-Structural	Acres	1,000	7,014	13,106
Structural	Structures	N/A	711	4,339
Watershed Improvement Work	Acres/Year	1,000	157	266.6
Range–Permitted Grazing 10/	M AUMs/Year	186	159	172.7
Allotment Management Planning	Plans/Year	15	2	2.5
Arterial and Collector Road Construction and Reconstruction	Miles/Year	69	7.3	9.8
Timber Purchaser Road Construction and Reconstruction	Miles/Year	180	49.0	38.5
Roads Suitable for Public (Passenger Car)	Miles	900 11/	829.8	Ave. NA
Roads Suitable for Public (High Clearance Vehicle)	Miles	5,380 12/	5,003.6	Ave. NA
Closed Roads	Miles	4,475 12/	3894.3	Ave. NA
Minerals Produced 12/	Million $/Year	13.5	.255 12/	0.7 12/
Mineral Operating Plans	Number Active /Year	354	694 13/	531 13/
Human Resource Program	Person Years/Year	4	27	25
Payments to Counties	Million $/Year	5.5	.86	1.7
Total National Forest 14/				
Allocated	Million $/Year		8.5	8.9
Appropriated	Million $/Year	20.6	20.1	27.9

1/ Salvage of cull, dead lodgepole pine, and small diameter (less than 5 inches) material which is not part of the allowable sale quantity.
2/ Includes all lands where activities to aid in tree reestablishment are employed.
3/ Includes roaded natural, roaded modified, rural, and urban recreation opportunity spectrum classes.
4/ All Forest acreage except for that assigned to Management Areas 15 and 16.
5/ Numbers of management indicator species are index values only, based upon acres of available habitat.
6/ Actual numbers to be generated during monitoring.
7/ Population data not available.
8/ Index number of elk summering on the Forest.
9/ Outputs include all improvements regardless of funding source.
10/ Levels shown are estimated for the Forest as a whole, based on available forage and investments by livestock permittees and the Forest Service. Levels for individual grazing allotments will depend on allotment-specific analysis.
11/ At end of decade.
12/ Gross metal values, including costs of extraction and processing. Therefore not directly comparable with other resource values contained in this analysis. For 1996 the amounts include an estimated value of $250,000 for locatable minerals, $5,000 for salable and aggregate minerals. Estimates for locatable mineral production is based on a confidential survey.
13/ Includes operating plans, notices of intent, salable material sales and in-house aggregate use and one oil and gas lease. Total includes new and previously approved plans, notices, and permits.
14/ Figures have not been adjusted for inflation.

4. FOREST PLAN MONITORING

Monitoring Item 1
Compliance with NEPA and Forest Plan

Goal

Comply with NEPA (National Environmental Policy Act of 1969) requirements, including cumulative effects analysis, during project-level decision making.

Purpose of Monitoring

To verify NEPA procedures are being implemented properly in individual project analysis, including:

- An appropriate level of environmental analysis, including scoping, occurs.
- There is an early and open process for determining the scope of issues to be addressed and those to be examined in detail.
- Environmental information is available to interested publics before decisions are made and before actions are taken.
- Documentation of the analysis and decision documents are appropriate for the scope, complexity, and nature of the action.

Threshold of Variability

If there is a failure to use appropriate procedures or to meet Forest Plan requirements.

Results and Evaluation

NEPA Monitoring

Approximately 86 NEPA decisions were made Forest-wide. As with previous years, reviews of project monitoring S&G (standards and guidelines) check lists and field reviews indicate that the interdisciplinary planning teams understand and implement the Forest Plan as designed. As with previous years, cumulative effects of management activities at the Forest and Blue Mountain provincial levels is a major concern. Completed watershed assessments, now totaling seven, aid in project- and Forest-level planning.

Appeals

Of the 86 NEPA decisions, two were appealed: Overlook II Recreational Project on the HCNRA, and; a vegetation competition project on the La Grande RD. Both decisions were upheld by the Regional Forester. The 1995 Rescission Bill (PL 104-19) encompassed all of FY 96, which prohibited administrative appeals on salvage timber sales (26 sales Forest-wide).

Litigation

One lawsuit was filed against the Forest in FY 96: *HCPC et al* vs. *USDA Forest Service* concerning implementation of the 1994 Wild and Scenic Snake River Recreation Management Plan. The case was dismissed in December of 1996 without prejudice.

Action to be Taken

Thresholds have not been exceeded. Continue to monitor.

Monitoring Item 2
Forest Plan Standards and Guidelines

Goal

Implement Forest-wide and management area S&Gs for all resources.

Purpose of Monitoring

To determine if applicable S&Gs from the Forest Plan are correctly and consistently implemented on individual projects.

Threshold of Variability

If there is a failure to correctly implement S&Gs or a failure of S&Gs to meet goals and objectives.

Results and Evaluation

S&G check lists were completed for pre-project reviews on projects documented in an EA, EIS, or decision memorandum. S&G check lists were also completed for the six project field reviews conducted by NFH (National Forest Headquarters) personnel. In previous annual monitoring reports this information has been analyzed and reports have been written. The 1996 data was not compiled in time for this annual report and, consequently, not summarized. Resource specialists reviewed the S&G check lists and have reported on any inconsistencies in those respective sections of this report. The check lists are available for review at NFH.

Action to be Taken

Continue to monitor.

Using the newly established Blue Mountain Zoned Monitoring Coordinator (stationed on the Malheur National Forest) modify the existing S&G check list to conform with a Blue Mountain-wide approach.

Monitoring Item 3
Insect and Disease Management

Goal

Manage forest to the extent that insect and disease levels are compatible with that of a healthy ecosystem.

Purpose of Monitoring

To determine if destructive insects and diseases are remaining below potentially damaging levels.

Threshold of Variability

If there is evidence of increasing or excessive insect or disease activity.

Results and Evaluation

Insect and disease monitoring is done with pheromone trapping by districts, field observations by district staff and specialists at the Blue Mountains Pest Management Zone, and lower crown sampling by PNW (Pacific Northwest Forestry and Sciences Lab in La Grande) entomologists. An annual aerial detection survey is done throughout the Region to provide information on insect infestations and insect-caused losses. Generally, the aerial survey identifies insect populations already in outbreak.

Populations of western spruce budworm and Douglas-fir tussock moth remained low in 1996. Based on historical trends, budworm is not expected to become epidemic for decades, while tussock moth populations need to be carefully monitored, on an annual basis. Larch casebearer caused variable amounts of defoliation in parts of the Baker and Unity RDs in 1996. Tree mortality is not expected. Populations should decline as parasites rebuild their populations in response to the increased casebearer numbers.

Recent trends of bark beetles in the drier pine communities indicate that overstocked ponderosa pine stands on the Forest have become more susceptible to bark beetles in recent years. Douglas-fir beetle populations continued to cause mortality in some heavily-stocked riparian communities, and overstocked stands with a high component of fir. An anti-aggregation phermone (MCH) was used to protect stands against Douglas-fir beetle in the Oregon Trail Interpretive Park in 1996. Douglas-fir beetle populations have also increased slightly in fire-scorched Douglas-fir associated with many of the 1996 wildfires in the Blue Mountains region. Monitoring on some of these burns will occur in 1997.

Large areas of especially virulent Armillaria root disease occur in several areas on the Forest. Many other areas in mixed conifer types have numerous individual tree and small group mortality. Compacted soils have been implicated in causing armillaria to become increasingly virulent.

Laminated root rot is located in a few known areas on the Forest. Douglas-fir and grand fir are readily infected and removed from the stand via mortality and windthrow. The Forest has implemented a policy of treatment to reduce potential for further spread of the annosus root disease by treating freshly-cut stumps with borax. In stands where stem decay is very low, artificial inoculation of select trees with fungi is being done to provide habitat for cavity nesters.

Four species of dwarf mistletoe occur on the Forest. Most have increased over the last century despite control strategies. Some broomed trees need to be saved for wildlife use, but should be situated so they do not pose a risk to the rest of the stand.

Action to be Taken

Continue to monitor defoliator populations in order to predict potential outbreak development. Monitor barkbeetle activity in 1996 wildfires. Apply silvicultural activities that manipulate stand density, species composition, and stand structure.

Monitoring Item 4
Timber Offered for Sale

Goal

To provide for the production of wood fiber consistent with various resource objectives, environmental requirements, and economic efficiency. To offer for sale up to an average of 141 MMBF ASQ (allowable sale quantity) and 205 MMBF TPSQ (timber sale program quantity) annually as averaged for the decade.

Purpose of Monitoring

To measure the success in offering cubic foot volume and species of chargeable timber established by the Forest Plan ASQ. 1990 through 1996 display volume offered in million board feet.

Threshold of Variability

Is the amount of timber offered for sale within +10% of the planned decade average?

Results and Evaluation

Timber Offered for Sale						
	Forest Plan Annual Average		Target Assigned by Regional Forester		Volume Offered for Sale	
Fiscal Year	TPSQ MMBF	ASQ MMBF	TPSQ MMBF	ASQ MMBF	TPSQ MMBF	ASQ MMBF
1990	205	141	215	141	210	147
1991	205	141	227	141	53	33
1992	205	141	200	141	79	66
1993	205	141	133	120*	23	8
1994	205	141	70	17*	29	17
1995	205	141	53	39*	54	39
1996	205	141	55	44*	53	44

*The Regional Office did not assign an ASQ target; this is the amount the Forest estimated would be offered.

The Forest was not budgeted for the volume identified in the Forest Plan as TPSQ or ASQ. The Forest offered 96% of the assigned target. One 2 MMBF sale was delayed due to direction of the Secretary of Agriculture; it was no longer exempt from appeal under Public Law 104-19. Allowing time for appeals prevented the sale from being offered prior to the end of the fiscal year.

Action to be Taken

Continue implementing the Regional Forester's Forest Plan Amendment 2 (Interim Approach for Sale Preparation) until the ICBEMP (Interior Columbia Basin Ecosystem Management Project) EIS is completed. When the EIS is completed, evaluate the changes and recommendations for possible incorporation into the Forest Plan.

Monitoring Item 5
Silvicultural Harvest Methods

Goal

To provide information regarding the harvest of wood fiber consistent with various resource objectives, environmental requirements, and economic efficiency.

Purpose of Monitoring

Measure area affected by timber sale activities by species group, management area, and silvicultural harvest method as specified in the Forest Plan.

Threshold of Variability

If there is greater than 20% deviation from the planned level in any harvest method category.

Results and Evaluation

As the deviation is greater than 20% at the broadest level, acres by harvest method; information about other planning assumptions, such as acres by species group; and management area are not displayed.

Harvest Method	Forest Plan Assumptions (acres)	1990	1991	1992	1993	1994	1995	1996
Commercial Thin	3,900	3,100	2,275	2,361	177	4,967	6,286	2,640
Clearcut	4,300	1,542	742	610	2	0	211	0
Shelterwood/Seed Tree	8,500	5,790	967	9,486	633	2,393	729	1,182
Overstory Removal	1,200	2,778	2,634	1,478	239	3	1,715	1,276
Selection	6,500	1,287	1,550	1,513	24	821	110	14
Sanitation/Salvage	0	25,902	3,193	5,942	5,203	92	2,681	9,317
Special Harvest	0	0	0	200	0	23	0	0
Total	24,400	40,399	11,361	21,590	6,278	8,299	11,732	14,429

In 1996, the Forest sold timber on cutting units covering an area of 14,429 acres; this equates to 59% of the acreage assumed by the Forest Plan. During the seven-year period (1990 through 1996), the Forest sold timber on cutting units covering an area of 114,088, equating to 67% of the acreage identified in the Forest Plan. The distribution of acres by harvest method is different than assumed in the Plan. This reflects the shift away from regeneration harvesting and an increase in sanitation/salvage harvesting. The Forest Plan made no assumptions for salvage harvesting, yet 52,330 acres (46% of the harvest acres) have been sanitation/salvage harvested during the past seven years.

Many assumptions incorporated in the development of the Forest Plan are no longer valid; the Forest is selling less volume than anticipated during the calculation of the ASQ. The shift in harvest methods has created a substantial reduction in volume offered for sale. The Forest Plan assumed an average harvest of 5.8 MBF/acre. In 1996, the Forest sold an average of 3.07 MBF/acre.

Action to be Taken

Same as monitoring item 4.

Monitoring Item 6
Precommercial Thinning

Goal

Achieve acres of precommercial thinning as specified in the Forest Plan. Meet stocking standards.

Purpose of Monitoring

To ensure that those acres certified as meeting stocking standards are consistent with target acres in the Forest Plan.

Threshold of Variability

If the accomplished acreage varies from the planned acreage by 10% or more on a decadal basis.

Results and Evaluation

The Forest Plan targets 7,400 acres of TSI (timber stand improvement) activity for completion annually, during the first decade. Acres treated in 1996 were as follows:

5 acres of release
5,337 acres of precommercial thinning
37 acres of pruning
5,379 acres of total timber stand improvement

Accomplishment in 1996 was 73% of our planned Forest Plan TSI goal. The decadal average accomplishment to-date is 5,800 acres or 78% of the Forest Plan goal, lower than the threshold of variability. Funding in 1996 was only 36% of the requested dollars needed to accomplish those acres identifed in need of improvement. If TSI was funded according to the needs identified in the Outyear Program Projection Report, accomplishment could have been 8,600 acres in 1996. Funding and targets for TSI continue to be allocated at levels significantly lower than identified needs. Reforestation, Regionally, continues to receive higher priority than TSI.

Action to be Taken

Continue to monitor and emphasize the need to report acres completed.

Monitoring Item 7
Harvest Units

Goal

Disperse harvest units and limit their size.

Purpose of Monitoring

To determine if the S&Gs for location, size, dispersal, and treatment of harvest units are adequate to assure compliance with other resource objectives, e.g., wildlife habitat, water quality, control of unwanted vegetation, and silvicultural prescriptions.

Threshold of Variability

If there is any identified failure to meet dispersion requirements.

Results and Evaluation

As with previous years, Forest-wide reviews of planned activities indicate a good understanding of Forest Plan S&Gs relating to location, size, dispersal, and treatment of harvest units. Findings indicate that Forest Plan S&Gs regarding size and dispersal of openings and state of vegetation are being appropriately implemented.

Action to be Taken

Continue to monitor.

Monitoring Item 8
Reforestation

Goal

Achieve reforestation, by natural and artificial means, to stocking levels established in the Forest Plan within given time frames.

Purpose of Monitoring

To measure stocking levels and to determine whether the levels were reached within the time frames assumed in the Forest Plan.

Threshold of Variability

If there is a greater than 20% plantation failure or more than 50% below prescribed stocking levels.

Results and Evaluation

An area is stocked to a satisfactory level when trees per acre meet the minimum or greater standards defined in the silvicultural prescription. Table 1 shows acres of reforestation accomplishment by treatment method as compared to assumptions made in the Forest Plan. Reforestation accomplishment for 1996 is 93% of the Forest Plan goal. Table 2 shows the current status of acres reforested five years after final harvest.

Table 1 - Reforestation Accomplishment

Treatment Method	Average Annual Acres from the Forest Plan (Acres)	Acres Accomplished <---------- Fiscal Years ---------->				
		1992	1993	1994	1995	1996
Planting	4,800	7,629	10,080	8,814	7,943	6,013
Seeding	0	98	0	0	0	0
NatRegen Site Prep	1,700	2,911	1,524	852	719	832
NatReg w/o SP Cert	8,000	3,304	4,490	4,829	3,154	6,636
TOTAL	14,500	13,942	16,094	14,495	11,816	13,481

Table 2 - Status of Reforestation After Final Harvest						
FY	Final Harvest Reported (acres)	Adjusted To-date acres	Revised Final Harvest acres	Adequately Stocked acres - %	Not Adequately Stocked acres - %	Not Adequately Stocked - No Further Treatment acres - %
1988	6,775	2,948	9,703	8,393-86%	1,267-13%	43-1%
1989	3,654	8,568	12,222	9,290-76%	2,924-24%	8-<1%
1990	25,318	-433	24,885	20,357-82%	4,528-18%	0-0%
1991	4,678	6,626	11,304	6,911-61%	4,374-39%	0-0%

In Table 2, above, 86%, 76%, 82%, and 61% of the acres that had a final regeneration harvest in 1988, 1989, 1990, and 1991, respectively, have adequate stocking in 1996. Many of the areas burned over by wildfires in the mid- and late-80s, and then subsequently salvaged, were planted to grass seed as part of the planned rehabilitation efforts. The resultant thick sod of grass adversely affected the survival of planted seedlings. These areas may need up to 20 years to adequately restock themselves naturally. Since some of these areas would not have been harvested had the wildfires not occurred, the Forest Service cannot justify attempting to reforest them every year.

First Year Survival: Results of the 1996 Plantation Survival and Growth Report shows first year survival at 75%, below the Forest Plan goal of 80%. First year survival was significantly lower this year due to several factors: (1) a prolonged summer drought that continued well into late fall; (2) an unseasonably severe frost event in mid-June after planting; and, (3) highly variable stock quality.

Third Year Survival: First year survival in 1994 was 72%. Today, the 1996 Plantation Survival and Growth Report shows third year survival has dropped to 49%, a significant and cumulative effect of the prolonged hot and dry summers of the 1994 and 1996 growing seasons. The report also shows that 79% of the total acres reforested, those acres planted three years ago, have been determined to be satisfactorily stocked at the time of the third year exam. The report also shows that 90% of all acres certified in 1996 met prescribed stocking objectives with only one treatment. Ingrowth from natural regeneration may contribute to the stocking level which leads to certification and first time success.

Projected time frames for reforestation range from one to 20 years, depending on the forest vegetation type and reforestation method prescribed.

Action to be Taken

Continue to monitor. With the adoption of an ecosystem management approach, there is a new trend toward less regeneration harvests and a resulting downward trend in reforestation. The need exists to re-examine some of the assumptions in the Forest Plan related to total anticipated acres of reforestation through the remaining portion of the decade.

Evaluate suitability for timber management for those burned areas where it is expected that reforestation will be a long-term process. Update suitability classification accordingly.

Evaluate plantation failure rates. Explore potential effects on economics and timber yield projections.

Monitoring Item 9
Lands Not Suitable for Timber Management

Goal

Assure that lands are correctly classified according to their suitability for timber management.

Purpose of Monitoring

To determine if forest lands are correctly classified according to their suitability for timber management and to verify land suitability within ten years.

Threshold of Variability

If the suitable land base changes by 5% or more.

Results and Evaluation

The current Forest Plan is based on the following classification for land suitability:

-1,411,925 acres classified as forested lands
-1,090,072 acres classified as tentatively suitable forested land
- 820,500 acres classified as suitable forested land

The EVG (existing vegetation) layer has been installed in our GIS (geographical information system). All forest land has been mapped, and the associated stand data is stored in a data base. The Forest has issued direction in the Timber Resource Planning Handbook, FSH 2409.13, outlining steps for field examination crews to use in identifying and recording land suitability.

An extensive update to the EVG layer is currently being conducted across the Forest. Completion of this update is estimated to be September 30, 1997. Some significant changes in acres of land suitability are anticipated to surface through this revision process.

Action to be Taken

Continue to monitor and emphasize need for re-evaluation of land suitability during project-level planning.

Continue to update total acreage of suitable forest land as new information is obtained. In 1997, once the Forest has completed the current update, query the revised EVG data and compare the suitable land acres on record at that time with the Forest Plan estimated acres for a trend in change and whether we are within the threshold of variability.

Determine the area of verified classification recorded in the EVG data base through queries to that data base.

Monitoring Item 10
Vegetation Management

Goal

The vegetation management program is effective in achieving resource management goals and complies with the vegetation management FEIS and mediated agreement. The need for vegetation treatments, particularly the application of herbicides and prescribed burning, is reduced.

Purpose of Monitoring

To determine if vegetation management is effective in achieving resource management goals and to determine if there is a reduction in the need for vegetation treatments, particularly the application of herbicides and prescribed burning.

Threshold of Variability

No threshold has been established.

Results and Evaluation

The final version of the Forests *Monitoring Guide for Vegetation Management Activities* was approved and published in June of 1993. The guide initiates a process to assure compliance with Forest Plan goals and the vegetation management FEIS and its associated mediated agreement.

Effectiveness and accomplishment data has been collected as required by the guide for the past five years and is displayed in the following tables. The first table compares the herbicide and prescribed fire activities to the total program, revealing an increase in herbicide use, and a decrease in prescribed fire activities from 1992 to 1996. Herbicide treatments will probably continue at a low level for the next few years while a backlog of difficult nonstocked sites are reforested and a more intensive noxious weed control program is conducted. The level of prescribed fire activity is uncertain based on the perceived need to increase this activity Forest-wide for ecosystem management needs, but at the same time follow the Environmental Protection Agency's recommended air quality standards.

Table 1 - Acres Treated Using Herbicides/Rx Fire Compared to Total Treatments

FY	Total Treated (acres)	Treated w/Herbicides (acres)	% of Total Treated	Treated w/Rx Fire (acres)	% of Total Treated
1992	29,925	721	2%	17,455	58%
1993	9,698	972	10%	5,525	57%
1994	9,945	1,338	13%	5,201	52%
1995	9,089	1,654	18%	2,781	31%
1996	8,974	1,773	20%	3,643	41%

Table 2 - Acres Treated by Various Vegetation Management Methods and Objectives						
	<---- **METHOD** (in acres) ---->					
Activity	Manual	Mech	Biol	Rx Fire	Chemical	Total
Silviculture						
Ref Site Prep	287	164	0	1,400	1,344	3,195
TSI Release	2,213	0	0	9	0	2,222
Tree Genetics	8	310	0	0	52	370
Research	0	0	0	0	0	0
Facilities Mtc						
Rec Areas	0	0	0	0	0	0
Adm Sites	0	9	0	0	10	19
Range Improvment	0	0	25	200	0	225
Noxious Weeds	77	0	40	0	367	484
Wildlife Hab Improvement	50	0	110	2,034	0	2,194
Right-of-Way Mtc						
Roads	7	21	0	0	0	28
Trails	33	0	0	0	0	33
Special Use Permits	0	0	0	0	0	0
Easements	0	0	0	0	0	0
Utility Corridors	0	204	0	0	0	204
TOTAL	2,675	708	175	3,643	1,773	8,974
% by Treatment	30%	8%	2%	40%	20%	100%

Action to be Taken

Continue to monitor according to the procedure outlined in the Forest *Monitoring Guide for Vegetation Management Activities* and analyze the goals and objectives of prescribed fire in ecosystem management in light of the recommendations in the *Eastside Forest Ecosystem Health Assessment* and the *Blue Mountains Ecosystem Restoration Strategy.*

Monitoring Item 11
Transportation System

Goal

Provide open road densities consistent with Forest Plan guidelines in order to meet resource objectives for wildlife habitat, water quality, and a mix of recreation opportunities and to provide access for management.

Purpose of Monitoring

To verify that progress is being made toward meeting the open road density guidelines established in the Forest Plan. Once open road densities are reduced to Forest Plan levels, monitoring will be continued to assure that road densities described by the Forest Plan are maintained.

Threshold of Variability

If system design, road density, or maintenance fail to meet management area objectives.

Results and Evaluation

The following table shows an estimate of open road miles relative to Forest Plan guidelines. Progress has been made toward closing roads, and more is planned for this field season. Considerable work remains to be completed.

Miles to Close to Meet Road Densities						
	By Year End					
District	1991	1992	1993	1994	1995	1996
Baker	565	350	350	25	0	0
Pine	261	261	261	153	153	153
Unity	214	214	214	60	60	60
La Grande	1131	1074	955	832	553	419
Wallowa Valley	586	525	472	431	410	404
Eagle Cap	20	15	15	12	12	12
Totals	2,777	2,439	2,267	1,513	1,188	1,048

The above table shows attempted closures. Effectiveness of those closures is 50% or lower in some areas when considering miles of road closed. See associated effectiveness monitoring under this monitoring item.

Eagle Cap RD has completed implementation of its access and travel management plan. Road miles that exceed Forest Plan guidelines are in locations where main roads travel through small portions of a given management area, and produce artificially high road densities.

No new closures were made on Baker, Pine, and Unity RDs in 1996.

La Grande RD made considerable progress this year, and has aggressive plans for closures in the 1997 field season. They were able to take advantage of several types of special funding to assist with accomplishing these closures.

Wallowa Valley RD continued to make some progress toward meeting the Forest Plan density targets.

Purpose of Monitoring

To determine whether road barriers (earth berms, guard rail barriers, etc.) are effective in keeping vehicles off blocked roads so that objectives of the Forest Plan can be met. Additionally, to determine which barriers are most effective.

Results and Evaluation

The following table shows closure effectiveness on data collected in 1996.

1996 Road Closure Effectiveness Summary

	Barrier Type			
	Earth Barrier		Gate/Guardrail	
District	No. Rds. Checked	% Effective-ness	No. Rds. Checked	% Effectiveness
Unity	30	83	8	38
Pine	41	83		
Baker	66	77	13	15
La Grande	193	80	35	83
Total	330	80	56	61

The effectiveness is based on a sample and does not represent total effectiveness of the road closures.

Most gates receive some type of use. Much of this use is by people who have a permit. If the responsible official is allowing use on these gated roads, resource objectives are probably being met. Roads with permitted use are not considered closed for the purpose of calculating Forest Plan open road densities. The installation and maintenance of gates is very expensive, and Districts are looking very closely at where they are truly needed, and considering who will pay operation and maintenance costs.

Most road closures have been accomplished using earth berms.

Action to be Taken

Continue to monitor. Continue to pursue all possible avenues to manage restriction decisions. Re-visit road density S&Gs during the Forest Plan adjustment process. Legally close and enforce closures on roads with locked gates, rails, earth berms, or signs.

Monitoring Item 12
Range Outputs

Goal

Within the constraints imposed by basic plant and soil needs, provide forage for utilization by wildlife and permitted domestic livestock.

Purpose of Monitoring

To determine if outputs for permitted livestock are as estimated in the Forest Plan, expressed in terms of animal unit months (AUMs), and to determine to what degree Forest Plan standards affect permitted outputs.

Threshold of Variability

If annual outputs (AUMS) for permitted domestic livestock fall more than 20% below permitted levels from the beginning of the preceeding five years.

Results and Evaluation

The Forest Plan does not set specific target levels for outputs of permitted livestock AUMs. Instead it indicates that actual outputs will vary depending on the effects of implementing the Forest Plan including forage utilization standards, riparian standards, and others. The monitoring data will be evaluated over a five-year period to average annual fluctuations in permitted numbers and to record long-term trends.

In 1996, there were 157,702 AUMs under term grazing permits and an additional 13,860 AUMs under term private land permits (which authorize use on private land waived to the government for management) on the Forest.

There were two permits which were not renewed on two allotments related to the implementation of the bighorn/domestic sheep compatibility decision of August 2, 1995. This resulted in the elimination of 4,000 ewe/lambs from the Temperance-Snake and 3,600 ewe/lambs from the HCNRA portion of the Mud Duck Allotment. These two permits formed a year-long operation for a total of 14,092 AUMs. These nonrenewals of the term permits were related to implementation of the Forest Plan and the HCNRA public land use regulations.

Removal of livestock on a few pastures and allotments was required when the prescribed utilization standards were reached prior to the established off date for the term permit or when mitigation requirements for the Snake River chinook salmon were met. These were not permanent reductions but were simply annual adjustments to respond to resource conditions.

This level of permitted grazing is within the threshold of variability.

Action to be Taken

Continue to monitor.

Monitoring Item 13
Forage Utilization

Goal

All grazing allotments will implement the Forest Plan utilization standards through AMPs (allotment management plans) and/or AOPs (annual operating plans).

Purpose of Monitoring

To ensure Forest Plan utilization standards are being properly implemented.

Threshold of Variability

If more than 10% of the pastures reviewed experience utilization, by any species of animal, exceeding the Forest Plan or AMP standards by more than 5%, as an average of use on key areas within a pasture.

Results and Evaluation

Forest Plan utilization standards, including modifications for ESA (Endangered Species Act) consultation mitigation, are being incorporated into each AMP and AOP. This has been accomplished for all allotments.

Utilization monitoring, complete with documentation, occurred on 314 pastures within 88 active allotments. A few pastures were grazed more than once during the year and were, therefore, monitored and reported as two pastures. There are 121 active allotments (with 513 active pastures) on the Forest. In addition, there were 21 allotments in a vacant status plus one additional allotment managed by the BLM (Bureau of Land Management).

A total of 582 monitoring data collections were made during 1996 for forage and browse utilization with 125 of these occurring within riparian areas.

a)	Approximate total pastures grazed by permitted livestock	493
b)	Number of active pastures monitored	314
c)	Percent of monitored pastures meeting threshold	91%
d)	Monitoring on less than 1% of the pastures was not timely enough to assure that the standards were met.	
e)	Nine percent of the pastures monitored did not meet standards.	

The threshold of variability was not exceeded for 1996.

Some pastures are not receiving adequate utilization monitoring. This situation is usually limited to lower priority allotments or pastures. This situation is a direct result of continued insufficient funding for range monitoring.

Action to be Taken

Forage and browse utilization monitoring will continue to be emphasized as funding and priorities permit.

Monitoring Item 14
Range Vegetative Conditions

Goal

The Forest goal is to have all significant areas of suitable primary and secondary range, including riparian areas, in satisfactory condition defined as forage condition is fair or better with a stable trend.

Purpose of Monitoring

To ensure that suitable primary and secondary ranges are in satisfactory condition with a stable or upward trend.

Threshold of Variability

By the year 2000, at least 85% of the suitable primary and secondary range is in satisfactory range forage condition and no more than 5% of the allotments are experiencing basic soil and water or other resource damage problems.

Results and Evaluation

As forage condition and trend information is "long-term" monitoring, it is necessary to compare current data with historical data. The process includes re-analysis of long-term monitoring plots as well as comparisons of apparent condition and trend. Apparent condition and trend is based on comparison of the existing plant community with the potential plant community.

From 1991 through 1996, condition and trend data has been collected on a total of 34 allotments. To date, only a portion of the analyzed allotments have had their data installed into a data base system. Therefore some data is not yet available for inclusion in this report.

Of the 22 allotments that have had their field data summarized, a total of 321,190 acres have been inventoried as follows:

	Forest Plan Standards	
	Met	Not Met
Suitable primary and secondary range Transitory range Nonrange Unsuitable range	159,496 ac. *18,757 ac. *32,674 ac. *96,448 ac.	13,815 ac.
Totals	307,375 ac.	13,815 ac.

Of the suitable and secondary range alone, 92% of the acres meet the current Forest Plan standard of fair forage condition with a stable trend or better. Only 8% of the acres do not meet.

* Inclusion of nonrange, transitory, and unsuitable range observations indicate that these acreages generally meet the Forest Plan standards for forage condition and trend. Given this, within the total allotment acreage analyzed, 96% of the acres meet the standard and only 4% do not.

The current pace of analysis is inadequate to ensure up-to-date information for allotment management planning on a reasonable schedule. The shortfall relates to inadequate funding for support such as fisheries, wildlife, and botany work.

Monitoring results indicate that range forage conditions overall are well within the threshold of variability.

There is a long-term, continuing need to define and implement a standardized riparian monitoring process that can identify "conditions" and relate them to impacting activities. Currently, there is a riparian/aquatic inventory that has been conducted on many Class I and II streams. The data from this inventory is not yet in a fully useable format. In addition, there have been no processes devised to adequately define riparian "conditions and trends". Some use is currently being made of a BLM developed process known as "proper functioning condition assessment." Continued use of this process will begin to add to the knowledge base concerning riparian/aquatic conditions.

Action to be Taken

Continue to monitor.

Report findings on riparian and upland rangeland separately in order to provide a better link to other monitoring items. This will be initiated as soon as classification systems and processes are in place to allow for inventory of riparian plant communities. Establish processes to define riparian "condition" in terms of impacting activities.

Develop process to allow for reporting of currently existing riparian data.

Monitoring Item 15
Range Improvements

Goal

Improve management of range vegetation through installation or implementation of range improvements included in the development schedule of AMPs.

Purpose of Monitoring

To determine that range improvement projects are being accomplished in accordance with annual program planning.

Threshold of Variability

If the accomplishment of annual range improvement targets falls more than 10% below the assigned output.

Results and Evaluation

Structural and nonstructural improvements are planned and funded through a variety of sources. Based on need and funding availability, targets for completion of improvement work are assigned to the ranger districts. In 1996, targets were assigned for 89 structures from all funding sources (a structure is defined as one water source, one-half mile of fence, one cattleguard, etc.). Actual accomplishments were 89 structures. Targets for nonstructural improvements from all funding sources, including seeding and prescribed fire, totaled 155 acres. These targets were met, with 155 acres of nonstructural improvements completed.

The results are acceptable.

Action to be Taken

Continue to monitor.

Monitoring Item 16
Allotment Management Planning

Goal

Develop and implement AMPs that fully meet the standards and guides of the Forest Plan for all allotments.

Purpose of Monitoring

To determine if priority allotments are receiving emphasis for range analysis and allotment management plan development; to determine if AMPs are being developed on schedule; and to assure on-the-ground implementation.

Threshold of Variability

If the AMP planning schedule varies by more than two years for 10% or more of the plans.

Results and Evaluation

The Forest Plan developed a schedule in 1991 to emphasize allotment management planning on the high priority allotments. The allotments targeted for planning efforts are (with limited exceptions) those identified as highest resource priorities. In 1995, national priorities changed from AMPs to NEPA decisions related to permit issuance, and resulted in a hold on AMP efforts. The Recission Bill of 1995 (PL 104-19) mandated a return to the AMP NEPA emphasis and established a NEPA 15-year timeframe for AMP NEPA.

In 1996, the field portion of the integrated range analysis was completed on three allotments. There was no target assigned for 1996.

Because of the significant change in priorities, only two NEPA documents for AMPs were completed in 1996. However, a total of 27 allotments currently are in some stage of the planning process including one AMP NEPA decision in appeal status.

Although the results show some progress in the accomplishment of analysis and planning, significant changes in emphasis combined with substantial reductions in funding continue to cause final accomplishments to remain low. Large increases in appeals and litigation continue to result in delays and cost increases for all decisions. Accomplishments continue to vary by District.

Action to be Taken

Continue to pursue adequate funding to accomplish allotment management planning in a timely manner.

Monitoring Item 17
Noxious Weeds

Goal

Management of noxious weed infestations will be done according to the Environmental Impact Statement (EIS) for Managing Competing and Unwanted Vegetation, the Forest Plan as amended by the Wallowa-Whitman Integrated Noxious Weed Management Plan, and applicable State laws and regulations.

Purpose of Monitoring

To determine if noxious weed infestations are being managed in accordance with the FEIS for Managing Competing and Unwanted Vegetation, Forest Plan direction, the Forest-wide Noxious Weed Management Plan and EA, and applicable State laws and regulations.

Threshold of Variability

If the assigned targets are not met by 10% or more.

Results and Evaluation

During 1992, the Forest completed and implemented a Forest-wide Integrated Noxious Weed Management Plan tiered to the Regional EIS for Managing Competing and Unwanted Vegetation. In 1994, the Forest completed an update to this decision to incorporate additional inventoried sites. In 1995, the Forest worked on an additional update. This NEPA decision should be completed in 1997.

In 1996, the Forest had a target from all funding sources of 594 acres of treatment for noxious weeds. Actual accomplishment was 574 acres. Herbicides were used on pre-approved treatment sites in strict accordance with the Noxious Weed Management Plan. The majority of the treatments accomplished in 1996 were by manual or chemical methods with some continuing biological treatment efforts.

Results for this monitoring item are acceptable.

Action to be Taken

Continue to monitor.

Increase monitoring for effectiveness of treatment actions and prevention actions in accordance with the Forest-wide Integrated Noxious Weed Management Plan.

Continue to develop a Forest-wide data base and GIS system to aid in improving the reporting of acres inventoried, treated (by method), sites monitored for treatment, and sites monitored for long-term effectiveness of treatments.

Monitoring Item 18
Watershed Standards, Guidelines and Best Management Practices

Goal

Maintain or improve the unique and valuable characteristics of riparian areas and floodplains. Maintain or improve water quality and quantity. Meet or exceed State water quality standards.

Purpose of Monitoring (Implementation)

To determine if watershed S&Gs and BMPs (best management practices) are being properly implemented within each project area.

Threshold of Variability

Evaluation is required when appropriate S&Gs or related BMPs (a) were not considered and incorporated in the project design phase, or (b) were not properly implemented.

Corrective action is required when improperly implemented S&Gs or related BMPs result in an actual or potential violation of applicable State and Federal laws, regulations or memoranda of understanding affecting surface water quality, floodplains, wetlands, riparian areas, riparian area dependent threatened or endangered species, or water rights.

Results and Evaluation

Monitoring of the implementation of watershed S&Gs and BMPs occurred at three levels.

Level 1 Implementation Monitoring occurred during the planning phase of a number of projects (refer to Ranger District check lists) to determine if S&Gs and BMPs were considered and incorporated in project design. A variety of management activities were monitored, including timber sales, timber stand improvement projects, range allotments, recreation developments, stream restoration and enhancement projects, and mining activities.

Action to be Taken

Continue to monitor to ensure that watershed S&Gs and BMPs are being considered and incorporated during project planning and design.

Level 2 Implementation Monitoring occurred during contract/permit administration phase to determine if watershed S&Gs and BMPs were implemented. All active projects were monitored by timber sale administrators, project managers, or contracting officers' representatives. Corrective action was taken where S&Gs were not being met or BMPs were being improperly implemented.

Action to be Taken

Continue to monitor to ensure that watershed S&Gs and BMPs are being met or properly implemented during project execution.

Level 3 Implementation Monitoring occurred during post-project field reviews by interdisciplinary teams to determine if watershed S&Gs and BMPs were implemented. Three projects were monitored during 1996 (one each at La Grande, Wallowa Valley, Eagle Cap RDs).

Action to be Taken

Continue interdisciplinary team follow-up of selected projects based on major resource issues. Ensure proper implementation and interpretation of watershed S&Gs and BMPs.

Purpose of Monitoring (Effectiveness)

To determine if Forest Plan S&Gs and BMPs are effective in meeting project objectives and State water quality standards.

Threshold of Variability

Evaluation is required when Forest Plan S&Gs and BMPs fail to meet State water quality standards and protect beneficial uses, or fail to meet other watershed protection or improvement objectives.

Corrective action is required for all projects and for Forest Plan S&Gs and BMPs that fail to meet State water quality standards.

Results and Evaluation

All Districts continued stream temperature, turbidity, and suspended sediment measurements described in the 1995 Forest Plan Monitoring Report. Wallowa Valley, Pine, Unity, and La Grande RDs continued to measure stream discharge at gauging stations and by other means.

Action to be Taken

Continue monitoring program as needed to establish base lines or determine trends. Expand program as budgets permit.

Monitoring Item 19
Riparian Area Cumulative Effects

Goal

Maintain or improve the unique and valuable characteristics of riparian and aquatic ecosystems, particularly the riparian vegetation and stream channel characteristics that influence water quality, wildlife habitat, and fish habitat.

Purpose of Monitoring (Effectiveness)

To determine if desirable riparian vegetation and stream channel characteristics of riparian and aquatic ecosystems are being maintained over the long term, or if in poor condition, are being improved after proper implementation of appropriate S&Gs and BMPs.

Threshold of Variability

Improperly implemented S&Gs and BMPs may result in serious damage to riparian and aquatic ecosystems and noncompliance with riparian, water quality, and fish habitat thresholds defined in watershed S&Gs.

Results and Evaluation

This monitoring item requires long-term projects which collect base line and trend data.

Two Districts began or continued 18 long-term monitoring projects. These consisted primarily of riparian area exclosures or stream channel stability monitoring.

Action to be Taken

Continue to monitor and maintain riparian exclosures. Re-read channel cross sections as needed. Share information with other Districts.

Monitoring Item 20
Peak Flow/Low Flow Cumulative Effects

Goal

Maintain favorable conditions of streamflow, including prevention or reduction of peak flow increases that can affect stream channel stability and maintenance of stream flow produced during May through September.

Purpose of Monitoring (Implementation)

To determine if S&Gs and BMPs that may affect peak and low stream flow are being properly implemented within each project area.

Threshold of Variability

Evaluation is required when appropriate S&Gs or related BMPs (a) were not considered and incorporated in the project design phase, or (b) were not properly implemented during the contract/permit administration phase of the project.

Corrective action is required when improperly implemented S&Gs or related BMPs result in (a) serious peak stream flow increases in small headwater drainages and noncompliance with water quality and stream channel stability thresholds defined in watershed S&Gs, or (b) lower summer stream flow than expected.

Results and Evaluation

All projects were designed and planned to be within desired ranges of variability. During 1996, timber management projects consisted primarily of commercial thinnings or stand density management of fire or beetle-killed stands. Stream peak and low flow S&Gs and BMPs were considered along with cumulative effects during the project planning process.

Action to be Taken

Revise the protocol for peak flow/stream channel cumulative effects analysis. Current protocol (WWPEAK) is cumbersome to use and underlying assumptions make interpretation difficult.

Purpose of Monitoring (Effectiveness)

To determine if S&Gs and BMPs are effective in meeting project objectives for peak and low stream flows. See paragraph about S&Gs under Purpose of Monitoring (Implementation).

To determine if stream flow models being used on the Forest accurately predict peak and low stream flows in watersheds with different hydrologic regimes and management systems (i.e., use data to validate models).

Threshold of Variability

An assumption of effectiveness monitoring is that S&Gs and BMPs that affect peak or low stream flow quantity, duration, or timing, have been properly implemented.

Peak Stream Flow: Immediate evaluation and appropriate corrective action are required under this monitoring item when a short- or long-term study or a validated model shows (1) that vegetation management activities (wildfire, prescribed fire, timber harvest, etc.) are not being patterned and scheduled to minimize the potential for adverse cumulative change in peak stream flow, including quantity, duration, or

timing of peak stream flow, or (2) in watersheds where vegetation management activities are influencing peak flows, stream channel (bed or bank) stability is not maintained at 100% of "potential" (compare Wildlife S&G 1). Thresholds for stream channel instability vary by Rosgen channel type and are not defined at this time relative to clearcut equivalency or other factors. The threshold range for clearcut equivalency is probably between 15 and 33%. It is assumed that S&Gs and BMPs are being properly implemented. Corrective action may include development and implementation of new BMPs.

Low Stream Flow: Immediate evaluation and appropriate corrective action are required under this monitoring item when a short- or long-term study or a validated model shows that vegetation management activities, out of stream water uses, or other activities have reduced stream flow during May through September. This may include quantity, duration, or timing.

Results and Evaluation

No specific peak flow or low flow stream studies were conducted in 1996. Permanent stream channel cross section transects have been established on a number of Forest streams to monitor long-term trends in channel conditions, such as sediment aggradation and degradation.

Action to be Taken

Continue to establish and/or read transects. Analyze and report results.

Monitoring Item 21
Soil Productivity

Goal

Maintain or enhance soil productivity, including the physical, biological, chemical, mineral and organic components that affect soil productivity.

Purpose of Monitoring (Implementation)

To determine if soil productivity S&Gs are being implemented, especially the standard which limits detrimental soil conditions within each activity area, including system roads and landings, to no more than 20% of activity area acreage.

Threshold of Variability

Evaluation is required when soil productivity S&Gs, related S&Gs, management area direction, or associated soil management practices (a) were not considered and incorporated in the project design phase, or (b) were not properly implemented during the contract/permit administration phase of the project.

Corrective action must be considered (a) when detrimental soil conditions, including system roads and landings, exceed 20% of activity area acreage, or (b) when noncompliance with a soil productivity S&G is causing noncompliance with a watershed S&G or BMP that is related to the Clean Water Act or ESA.

Results and Evaluation

Level 1 monitoring occurred during the planning phase of a number of projects to determine if soils S&Gs were considered and incorporated into the design of the project. These were primarily timber management projects described under monitoring item 18.

Level 2 monitoring occurred during the contract/permit administration phase of the following projects to determine if S&Gs were implemented:

> Marr Flat Allotment, Alder Creek, Little Sheep Creek Hydroelectric Plant, Wallowa Valley riparian fencing, Wapiti TS, Wapiti prescribed burn, Lostine campsite stabilization, Pittsburg Allotment, Lower Montane subsoiling, Lower Montane winter logging.

Level 3 monitoring occurs during post-project field reviews by interdisciplinary teams and specialists to determine if S&Gs were propoerly implemented. No level 3 monitoring was reported under this item in 1996.

Action to be Taken

Continue to monitor use and application of soil productivity S&Gs.

Purpose of Monitoring (Effectiveness)

To determine if soil productivity S&Gs, and accepted soil management practices that are believed to achieve soil productivity S&Gs, are effective methods for maintaining or enhancing soil productivity. These projects may be short- or long-term and may require pre- and post-project data collection. Included are projects designed to determine if specific soil management practices are preventing or ameliorating detrimental soil conditions as planned. If projects are also designed to determine compliance with soil productivity S&Gs, specifically the requirement that detrimental soil conditions not exceed 20% of activity area acreage. Results will also be reported in the implementation monitoring section.

Threshold of Variability

Evaluation and corrective action are required when a soil productivity S&G, or an accepted soil management practice used to achieve a S&G, or lack of a S&G for a documented soil management problem, do not appear to maintain or enhance soil productivity.

Results and Evaluation

Limber Jim Fuel Reduction Study: This study is a cooperative project involving the Blue Mountain Natural Resources Institute, PNW, Oregon State University, and the La Grande RD. One component of the study is to determine impacts on soils caused by skidder/forwarder, harvester/forwarder, and cable systems to remove low value timber from relatively flat ground. Initial results are expected in 1997.

Subsoiling conducted on 10 acres of the Velvet TS on the La Grande RD.

Action to be Taken

Rewrite Regional and Forest Plan soil productivity protection standards to make monitoring easier and more economical for field personnel. This will allow for monitoring more projects, provide for more rapid feedback, facilitate restoration measures where needed, and promote better on-the-ground management.

Monitoring Item 22
Air Quality

Goal

To meet the requirements of the Clean Air Act and the Forest Plan.

Purpose of Monitoring

To determine if emissions from prescribed fire are managed within the requirements of the Clean Air Act. The primary considerations are the National Ambient Air Quality Standards for particulate matter 10 microns or smaller (PM10) that are established to protect human health.

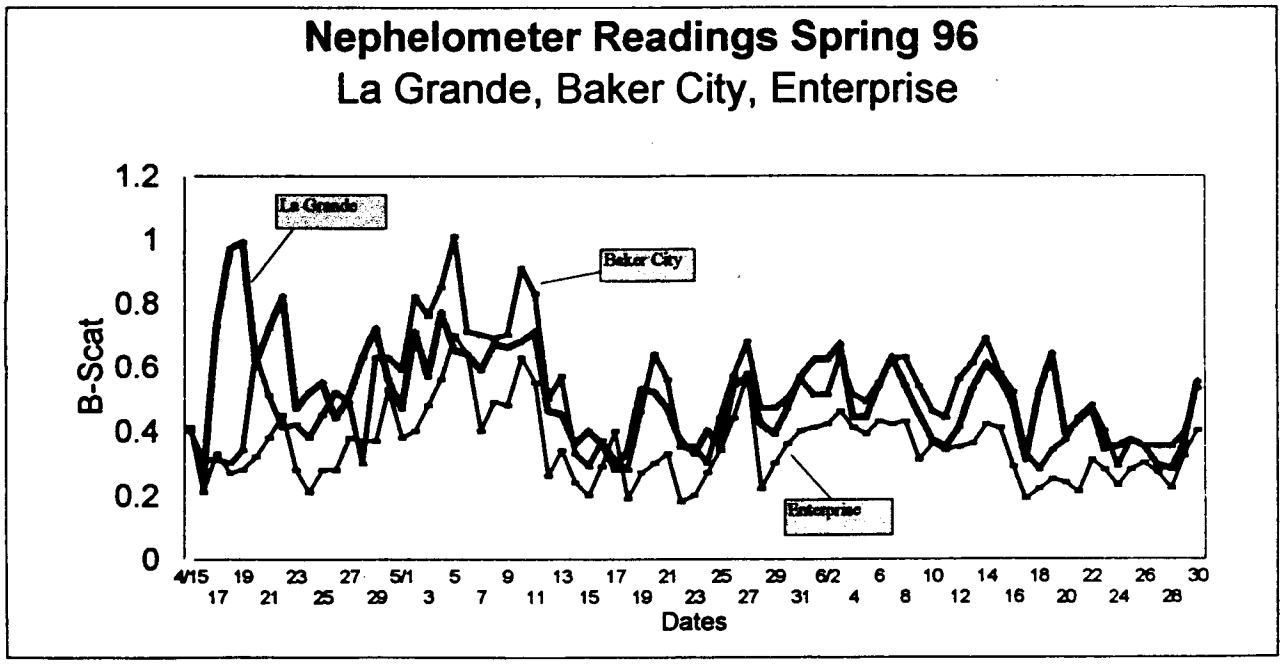
Threshold of Variability (PM10)

Established threshold standards for PM10 levels have been set by National and State agencies at 50 micrograms per cubic meter of air as an annual arithmetic mean and an average daily standard of less than 150 micrograms per cubic meter in a 24-hour time period.

Results and Evaluation

1996 was the second year of the implementation of the MOU (memorandum of understanding) between the ODF (Oregon Department of Forestry), Region 6, and the DEQ (Department of Environmental Quality). This interagency agreement provides the framework for implementation of an innovative and effective air quality monitoring program. It allows for implementation of a smoke management plan for the Blue Mountain National Forests. All units are tracked through to completion with final estimates on emissions produced. As part of this program, ODF also issues smoke dispersal forecasts to aid in planning and executing burn projects to minimize possible adverse health effects to local communities.

The following table displays the spring burning period readings from the nephelometers located in Baker City, Enterprise, and La Grande. These readings demonstrate that no significant intrusions occurred at any of these sites during the spring burning season of 1996.



Action to be Taken

Continue to participate in the real time monitoring network. Expand the time period the equipment is in use as the potential for impacts from fall prescribed burning increases.

Purpose of Monitoring

To ensure Clean Air Act requirements for the protection of Class I areas from the effects of air pollution are met. The Eagle Cap Wilderness and Hells Canyon Wilderness are Class I areas.

Results and Evaluation

Visibility is the only AQRV (air quality related value) that is currently being monitored for Clean Air Act and Forest Plan compliance. The State of Oregon EPA (Environmental Protection Agency) is the government agency that has established and maintains the camera network used to measure visibility effects. They have established a manual camera location on Mt. Howard (Hells Canyon Wilderness) and Point Prominence (Eagle Cap Wilderness). The Forest supplies lookouts who are responsible for taking pictures three times a day with the camera pointed at Burger Butte (Eagle Cap Wilderness) and Hat Point (Hells Canyon Wilderness).

An AQRV monitoring plan has been received from the contractor hired to write an air quality monitoring plan for the Forest. This plan will be implemented in FY97 at a level commensurate with funding levels. Information contained in the report indicates the need to continue to monitor the status of Class I visibility during the protection period between July 4 and Labor Day. Additional information contained in the draft advises that monitoring of the archaeological (pictographs) within Hells Canyon is to be considered due to their significance and sensitivity to acid rain.

Action to be Taken

Institute the recommendations contained in the monitoring plan to the extent the budget permits, and risks to the referenced AQRVs warrant.

Monitoring Item 23
Fisheries Habitat

Goal

Maintain or improve anadromous and resident fish habitat

Purpose of Monitoring

Ensure that Forest Plan targets for anadromous fish habitat are met.

Determine if stream restoration and habitat improvement projects are effective in meeting aquatic habitat objectives as stated in the Forest Plan, PIG (Policy Implementation Guide), and salmon summit.

Threshold of Variability

If there is a decrease in habitat capability or fish populations in a watershed or subwatershed. The monitoring efforts in 1994 were designed to establish base line condition. Future inventory of stream reaches will provide information on changes.

Results and Evaluation

A total of 254 acres of riparian habitat were planted. A total of 19 fisheries habitat structures were placed in streams. This compares with the Forest Plan average annual projected output of 250 acres and 500 structures of fish habitat improvement work. The reduction in available funds for fisheries construction work resulted in postponement of planned anadromous habitat work and reduced accomplishment.

Fish Habitat Projects

Stream structure maintenance: Fifteen (15) structures were repaired.

Stream structure monitoring: 677 stream structures were monitored across the Forest. Monitoring found that 432 structures were functioning properly, 207 were partially functional, and 38 were nonfunctional.

Riparian plant maintenance: Previously planted and/or fenced riparian areas require care and maintenance. Forest personnel performed care and up-keep work on 863 acres of riparian area.

Fish Habitat and Species Distribution Inventory

Stream inventory: The Forest surveyed 130 miles of stream habitat using the Region 6 Hankin and Reeves methodology.

Species distribution inventory: The South Zone (Baker, Pine, and Unity RDs) electrofished 37.6 miles of stream habitat to determine species composition, distribution, and relative abundance. The primary purpose of the work was to assess bull trout distribution and abundance.

Action to be Taken

Continue to monitor.

Monitoring Item 24
Anadromous Fisheries Consultation (Chinook Salmon, Snake River Drainage)

Goal

Projects meet "not likely to adversely affect" criteria through implementation of projects.

Purpose of Monitoring

To ensure that projects are being implemented under the terms and conditions of the Section 7 consultation BO (biological opinion) agreed to with NMFS (National Marine Fisheries Service) that result in a project being not-likely- to-adversely-affect listed species.

To determine if the prescribed modifications are effective in actually meeting the "not likely to adversely affect" criteria.

Results and Evaluations

Timber sales: Monitoring of seven timber sales found that the projects were in compliance with the standards, guides, and mitigating measures prescribed in the EAs (environmental assessments) and BEs (biological evaluations). No adverse effects to habitat or PET (proposed endangered and threatened) species occurred.

Snake River fall chinook protection: Fall chinook redds were monitored by air and then "ground truthed" to verify results. The NMFS BO required the Forest Service to ensure redd sites were protected from damage by power and float boaters. Results of the field monitoring showed no adverse effects occurred. The study found that 113 redds were counted in the Snake River. Work was conducted by USFWS (U. S. Fish and Wildlife Service) and Forest Service personnel using aerial, foot, and underwater survey techniques. The Grande Ronde River had 20 redds and the Imnaha River had three redds in addition to those found on the Snake River.

Range: The Forest monitored 254 active pastures in the area of critical habitat for Snake River chinook salmon. It was found that 238 of the pastures met the standards agreed to in the consultation with NMFS. A total of nine pastures did not meet standards and the determination was uncertain for six pastures. This constitutes a 95% compliance rate.

Proper functioning condition analysis: PFC (proper functioning condition) analysis was initiated on the Forest in 1995. The BLM methodology (TR 1737-9 1993) was taught to Forest hydrologists, biologists, vegetation managers, and other land management specialists in order to improve riparian monitoring and management. Application of the methodology was used on 24 miles of stream. All stream reaches found to be functioning-at-risk were on an upward trend which indicates management practices are being implemented that are ensuring recovery of the riparian areas.

Results of Proper Functioning Condition Analysis				
	PFC Determination			
Zone\ District	Nonfunctional	Functioning-at-Risk	Proper Functioning Condition	Total Miles
WMZ LAG	0 0	12 8.0	4.0	16.0 8.0
Total	0	20.0	4.0	24.0

Action to be Taken

Continue to monitor.

Monitoring Item 25
Columbia River Basin Anadromous Fish Habitat Management Policy Implementation, PACFISH Requirements, and INFISH Requirements

Goal

Commitments identified in the Columbia River Basin Anadromous Fish Habitat Managment Policy, PACFISH strategy, and INFISH strategy are met.

Purpose of Monitoring

To ensure the actions identified in the PIG for the Columbia River Basin Anadromous Fish Habitat Management Policy, PACFISH S&Gs, and INFISH S&Gs are being implemented as planned.

Results and Evaluation

DFCs (desired future conditions): The Columbia River Basin Anadromous Fish Habitat Management Policy objectives were established in 1993. Approximately 90% of the DFCs for streams in anadromous fish habitat have been established. All Section 7 watersheds in the Snake River Basin that require ESA consultation have DFCs recommended in the BAs (biological assessments) submitted to the NMFS. The Upper Grande Ronde River, Catherine Creek, Upper Main Grande Ronde River, Middle Grande Ronde River, Wallowa River, Lostine River, Minam River, Big Sheep Creek, Imnaha River, Chesnimnus Creek, and the Snake River all have DFCs established in the BAs for the Section 7 consultation completed in 1994. The North Fork of the John Day River will be completed in 1997 in conjunction with a watershed analysis project.

Stream inventory: Stream inventory required by the PIG is approximately 95% complete. Stream inventory using a level II Region 6 survey protocol was completed on 130 miles of anadromous and inland fish streams in 1996. Approximately 2,000 miles of survey have been completed since 1989. This data resides in a Regional data base which is accessible to biologists across the Region.

PACFISH requirements: There were 10 mining, 20 timber, 7 recreation, 3 range, and 14 other BEs written to insure PACFISH standards, designed to protect anadromous fish and aquatic resources were met.

INFISH requirements: There were 13 mining, 3 timber sale, 1 range, 1 recreational, and 4 other BEs written to ensure protection of fish and aquatic resources in the inland fish portion of the Forest

Action to be Taken

Continue to monitor.

Monitoring Item 26
Salmon Summit Action Plan Commitments

Goal

Implement commitments identified in the Salmon Summit Action Plan in a timely manner.

Purpose of Monitoring

To ensure commitments identified in the Salmon Summit Action Plan are being implemented in a timely manner.

Results and Evaluation

Riparian Acquisition Opportunities: No riparian parcels were acquired in 1996. The acquistion program is actively seeking and acquiring parcels in areas identified by the inventory that would benefit anadromous fish. The need to combine desirable parcels, willing sellers, and funding results in a variable annual acquisition of lands.

Livestock Management: The Forest has a total of 79 active allotments that include riparian areas directly adjacent to anadromous fisheries habitat. All of the Snake River allotments are administered to ensure that they are not likely to adversely affect endangered salmon as required by ESA. (One allotment is in North Fork of the John Day River and 78 are Snake River.)

Monitoring of range allotments is conducted to ensure S&Gs are being met as well as ESA requirements. (See results of grazing monitoring).

Mining Management: The Forest has identified active mining operations that potentially may affect anadromous fisheries habitat. Two operations were active in the Upper Grande Ronde River Section 7 watershed. The operations meet Forest plan S&Gs and are closely monitored. Reclamation is not required because all work is within the channel prior to salmon spawning.

The Camp Carson mining site that threatened the Upper Grande Ronde River spring/summer chinook habitat and population received restoration treatment in 1995. The site was extensively evaluated and consulted on with NMFS prior to the removal of extensive overburden that threatened to slide into the area used by salmon. Monitoring of the site during 1996 resulted in additional work being planned for the summer of 1997.

Diversion Screening and Constructed Barriers: The Forest has completed an inventory of existing diversions requiring screens. A total of 24 diversions were identified in 1994 and five needed screens to meet anadromous fish protection requirements. Temperance Creek, Dug Bar, and, potentially, Little Bear Creek are the only streams remaining that may require fish screens. Temperance Creek and Dug Bar have been shut down. Little Bear Creek was screened in 1996 in a cooperative project with the ODFW (Oregon Department of Fish and Wildlife).

Action to be Taken

Continue to monitor.

Monitoring Item 27
Old-Growth

Goal

Maintain the amount, size, and distribution of old-growth forest stands specified in the Forest Plan.

Purpose of Monitoring

To compare acres retained in old growth, by management area, with Forest Plan target acres.

Determine whether the number, size, and spacing of areas designated as old-growth and pileated woodpecker feeding areas are being retained according to Forest Plan definitions and standards, and if they are being used by old-growth dependent species.

Threshold of Variability

If there is a loss of any designated old-growth stand. If more than 10% of the directed pileated woodpecker feeding areas are not to standard of designation, juxtaposition, and/or trees per acre.

Results and Evaluation

Approximately 3,030 acres in MA (management area) 15 were surveyed during 1996. Of those surveyed acres, only 600 acres (20%) meet the old-growth standards in the Forest Plan. The Forest-wide one-acre survey technique (originated by Pine RD) was followed.

Since 1990, about 29,885 acres of designated old-growth areas have been surveyed. Only about 28% of these acres have met the Forest Plan old-growth definition. Stands that did not meet standards were mainly deficient in large diameter trees, snags, and down logs. Many have had some partial timber harvesting in the past. In most cases, replacement stands are unavailable. Firewood cutting has reduced the value of some old-growth stands, and wildfire has destroyed some designated old-growth stands.

Since only about 28% of the allocated old-growth meets the Forest Plan definition, and replacement stands are not available, management requirements for old-growth are not being met. Results indicate the threshold of variability has been greatly exceeded.

Action to be Taken

Continue to implement Regional Forester's Forest Plan Amendment 2 to maintain all existing old-growth forest stands in all allocations. This will maintain options for meeting the management requirements for managing old growth.

Continue field surveys for designated old-growth areas.

Concerns associated with old-growth management have been submitted to the Regional Forester as a potential issue to be considered in a Forest Plan adjustment. Evaluation of inventory results will be conducted in support of the Forest Plan adjustment process.

Monitoring Item 28
Dead and Defective Tree Habitat and Primary Cavity Excavators

Goal

Meet or exceed the minimum numbers, sizes, and distribution of dead and defective trees and logs in order to meet direction in the Forest Plan and Interim Approach for Sale Preparation, Eastside Forests (RF Amendment 2).

Purpose of Monitoring

To determine if all sale activities will maintain snags at 100% potential population levels of primary cavity excavators.

To determine if down logs greater or equal to 12 inches dbh (diameter breast height) are being left at an average of 20 pieces per acre in mixed conifer stands. In ponderosa pine stands, leave all large woody material.

To determine base line population numbers and trends.

Threshold of Variability

If more than 10% of the surveyed areas have less than 90% of the minimum prescribed dead and defective trees, snags, and logs. If the expected primary cavity excavators are absent from more than 10% of the surveyed sites, or are at 80% or less of predicted numbers.

Results and Evaluation

All sales were screened to meet direction in RF Amendment 2. This direction requires that snags be retained at 100% potential population levels of primary cavity excavators. Approximately 13,500 acres covering 11 timber sales were surveyed. Of those acres surveyed, about 9,000 acres met the 100% level. On acres deficient in snags, K-V snag-creation projects were designed to mitigate those deficiencies. K-V funding is not available on all projects; therefore, the threshold of variability is exceeded on those timber sales.

No estimates for down logs or green tree snag replacements were given. No surveys were conducted for use by primary cavity excavators.

Action to be Taken

Funding needs to be provided to survey snag levels over large analysis areas and track these through the post sale process. Funding also needs to be provided to sample for primary cavity excavators to determine base line populations and trends.

Obtain proper funds to create snags where deficiencies exist.

Implement mitigation measures in Forest Fuelwood EA.

Monitoring Item 29
Pileated Woodpecker

Goal

Maintain viable populations of pileated woodpeckers.

Purpose of Monitoring

To determine whether or not pileated woodpeckers are using designated habitat and feeding areas as planned.

To determine population trends.

Threshold of Variability

If there is greater than 10% variance from expectations in pileated woodpecker occupancy, use, or production on a five-year average. If populations are on a downward trend.

Results and Evaluation

Sampling for pileated woodpecker population levels was not funded and did not occur in 1996. There were no nest surveys or monitoring this year to determine trend. Foraging sign and sightings were noted during timber sale surveys.

Action to be Taken

Continue to implement Regional Forester's Forest Plan Amendment 2 to maintain all existing old-growth forest stands, the 100% snag level, and adequate down logs.

If pileated woodpeckers are going to continue to be used as management indicators, then both habitat and population monitoring need to be completed. Without this information, the Forest cannot confirm assumptions we made about this species within the Forest Plan.

Monitoring Item 30
Goshawk Populations

Goal

Maintain viable or higher populations of goshawks.

Purpose of Monitoring

To determine whether goshawks are using allocated old-growth habitat or nesting habitat in other allocations where considerations allow.

To determine base line populations and trends.

Threshold of Variability

If there is greater than 10% variance from expectations in goshawk occupancy, use, or production on a five-year average.

If there is a 20% or greater shift in prey used over a five-year average.

If there is greater than 10% deviation in predictability of goshawk nest site occurrence on a three-year average.

Results and Evaluation

All ranger districts completed at least some goshawk monitoring in 1996. A total of 19 known nest sites and four general timber sale areas were surveyed. Of these, eight were found to be active. Fifteen young were fledged, for 1.8 young per active nest.

No monitoring of goshawk prey species was conducted. Funding was not available to determine base line populations and trends.

There is an inadequate level of monitoring to address the threshold of variability. Inventory on at least some timber sale areas is inadequate to ensure location of active nest territories. Without this inventory, the protection afforded by Amendment 2 is not realized.

Action to be Taken

Goshawk surveys should be mandatory for each new timber sale analysis area since this action has the potential to modify existing habitat.

Follow guidelines for goshawk habitat management outlined in RF Amendment 2.

Survey for goshawk nest site occupancy and productivity Forest-wide.

Monitoring Item 31
Pine Marten Populations

Goal

Maintain viable or higher populations of pine marten.

Purpose of Monitoring

To determine if the old-growth habitats (by management areas), subalpine forest, and lodgepole pine areas are available and being used by pine marten as planned.

Threshold of Variability

More than 10% of the identified pine marten habitat is unused within the expected distributional and use zones including active Forest management activities. More than 20% variance from accepted norms for reproductive parameters. More than 20% variance from anticipated distributions.

Results and Evaluation

All Districts, except La Grande, reported not having sufficient funds to complete any monitoring for martens. Therefore, we cannot determine populations, reproductive parameters, or habitat preferences.

The La Grande RD completed winter track surveys in 11 areas on 12 days, from December 1995 to March 1996. A total of 21 marten were detected. These were found exclusively in mature and old-growth successional stages.

Evelyn Bull also continued her marten research in the Beaver Creek and Limber Jim watersheds. Track counts indicate a minimum of 26 marten in the study area, 13 of which are radio-collared.

Action to be Taken

If the marten is going to continue to be used as a management indicator species, both habitat and population monitoring needs to be completed. Without this information, we can not confirm assumptions made about this species in the Forest Plan. Appropriate funding is necessary.

Continue to implement RF Amendment 2 to maintain all existing old-growth forest stands, the 100% snag levels, and adequate down logs.

Monitoring Item 32
Elk Habitat/Populations

Goal

Provide near-optimum hiding cover, thermal cover, and forage conditions on big game winter and summer ranges.

Purpose of Monitoring

To assure standards and guidelines for hiding cover, thermal cover, forage, and open road density are being applied appropriately.

Threshold of Variability

If there is a failure to implement Forest Plan standards and guidelines correctly. If elk populations are +/- 15% from projections and differences are attributable to Forest activities.

Results and Evaluation

Of the 12 reported projects that appeared to have the potential to affect elk HEI (habitat effectiveness index), three projects did not meet the HEI objective of 0.5. High road densities and low hiding cover continue to be the major cause of not meeting HEI objectives. On two projects, HEI was not calculated. On five projects the HEI objective will be met with effective implementation of the road closure plan. Road closure effectiveness has been variable. Where road closures are not effective, elk habitat suitability would be lower than the calculated values for the effected planning area.

The Dry Beaver-Ladd Canyon elk enhancement project, designed specifically to enhance elk habitat conditions, has been implemented over the past three years. This project has reduced road densities from over three miles per square mile to .6 miles per square mile and enhanced forage on 3,500 acres through prescribed burning and fertilization.

Action to be Taken

Expand the concept of the Dry Beaver-Ladd Canyon project to other important elk areas on the Forest.

Set standards for each component of the HEI model (cover, road densities, spacing, and forage) by subwatershed. Evaluate the need to amend Forest Plan direction on HEI as directed in the record of decision.

Emphasize the need to meet open road densities both during project activity and after projects. Where densities cannot be met, emphasize the need to provide mitigation to meet resource objectives.

Purpose of Monitoring

To determine if elk numbers (22,350 post harvest) and their corresponding management objective parameters are being maintained.

Results and Evaluation

Post season elk numbers for 1996 for the Wallowa-Whitman units were 23,600 elk. This is 6% over management objective and within the established threshold. Summarizing all ten units, bulls per 100 cows averaged 7. This figure is below management objective of 12%, but is an improvement from last year. Calves per 100 cows averaged 33%, well below the objective of 43%.

Monitoring Item 33
Bald Eagles

Goal

Protect and manage habitat for the perpetuation and recovery of bald eagles.

Purpose of Monitoring

To determine if the nesting, communal roosting, and associated foraging habitats are being identified and protected.

To determine if individual site management plans are being developed.

To determine if the young per occupied territory goals are being met.

Threshold of Variability

If a single nest or roost site is compromised due to Forest Service activities. If there is two years or more from time of discovery to completion of an approved site management plan. If there is 0.09 young per occupied territory, for all occupied territories under Forest management, in any given five-year period.

Results and Evaluation

Two bald eagle nests were closely monitoried on the Forest in 1996. These two nests produced two young. Both sites have approved nest site management plans, but an alternate nest site used by the eagles on Unity RD are outside the eagle management area. The reason for the nest abandonment of the Unity nest site is due to one adult dying.

Monitoring of winter roost sites were completed on the La Grande RD from mid-December through March. Eagles observed on a given survey ranged from 1 to 15. Some level of monitoring was also completed on other Districts with known roost sites. Information is compiled by Frank Issacs and is available in his annual report. Two roost sites are covered by site plans.

Long-term nest productivity is within the guidelines established in the Forest Plan.

Recommendations for protection of bald eagle roost sites were incorporated into the Snake River Wild and Scenic EIS.

Action to be Taken

Continue to monitor both nest and roost sites.

Update the new Unity nest site plan in 1997.

Develop a bald eagle management plan which will identify active and potential nest and roost sites and provide direction for management of these sites.

Monitoring Item 34
Peregrine Falcons

Goal

Protect and manage for the perpetuation and recovery of the peregrine falcon.

Purpose of Monitoring

To determine if the nesting and associated foraging habitats are being identified and protected.

To determine if individual site management plans are being developed.

To decide whether potential nest habitats are identified and being managed to maintain suitability.

Threshold of Variability

If TE&S (threatened, endangered, and sensitive) species management is off plus or minus 20% from the Forest Plan "Multi-Year Action Plan." If there is any lag time in developing individual site management plans for reintroductions sites or active nest. If there is less than 1.35 young per occupied territory, for all occupied territories under Forest management, in any given five-year period.

Results and Evaluation

Two successful nests were monitored on the La Grande RD in 1996. Five birds were fledged from the two sites. Nest site plans have not been completed for either site. Another nest site is located in the Hells Canyon Wilderness. Productivity in 1996 was one fledgling. No nest site plan has been written.

Approximately 18 potential nest sites were surveyed in 1996, with cooperative funding from Idaho Power Company. No active nests were found.

Action to be Taken

Continue to monitor all active nest sites and search for additional nests at each habitat identified to have good potential.

Develop a peregrine falcon nest site plan for each nest site.

Develop a peregrine falcon management plan which will identify all active and potential nest sites and provide direction for management of these sites.

Purpose of Monitoring

To determine if the young per occupied territory goals are being met.

Results and Evaluation

The three nest sites produced six fledglings, which is two young fledged per active nest. This exceeds the 1.35 young per occupied site standard.

Action to be Taken

Continue to monitor productivity in known nests.

Monitoring Item 35
Sensitive Species

Goal

The goal of the sensitive species program is to protect and manage habitat for the perpetuation and recovery of plants and animals which are designated as sensitive by the Regional Forester. The Forest Service is mandated to assure that management activities do not jeopardize the continued existence of any of these species or result in adverse modification of their essential habitat.

Purpose of Monitoring

To determine whether species management guides for birds and mammals are being developed in a timely manner based on an established schedule.

To determine if project objectives and practices are adequate to protect bird and mammal species viability and to prevent uplisting of species.

Threshold of Variability

No thresholds have been established for this monitoring item.

Results and Evaluation

Protection of sensitive birds and mammals and their habitats has been through prescriptions developed during project-level planning. The effectiveness of these prescriptions and associated risks are documented in BEs.

To address species viability, it is necessary to evaluate population levels and address habitat needs at a scale larger than the project level. This can only be accomplished through development of a species management guide for each sensitive species. Before species management guides can be written, complete inventories and ecological information is necessary. No species guides have been written.

Surveys for Townsend's big-earred bats were completed on the HCNRA. The monitoring resulted in new distribution points for this species, as well as additional information on other bats.

Two historical upland sandpiper nest sites were monitored on the La Grande RD. One individual sandpiper was located.

Other studies that could provide some information on sensitive species are being conducted. A level II land bird survey of riparian areas is being conducted on private lands near the Wallowa Valley RD. A portion of two routes are within the Forest's protection boundaries. Breeding bird surveys and Christmas bird counts have provided additional information.

Action to be Taken

Current budgets do not allow for monitoring at levels required in the Forest Plan. Monitoring is often accomplished by cooperative funding or when projects, such as timber sales, require monitoring. Continue basic inventories of sensitive birds and mammals when funding is available.

Monitoring Item 36
MacFarlane's Four-O'Clock

No report was compiled due to higher priority work.

Monitoring Item 37
Greenman's Lomatium

No report was compiled due to higher priority work.

Monitoring Item 38
Minerals

Goal

Provide for exploration, development, and production of a variety of minerals in coordination with other resources and ongoing rehabilitation of mine sites.

Purpose of Monitoring

To determine whether S&Gs for minerals operations are responsible and effective in providing resource protection. To determine if the S&Gs are being implemented correctly.

Threshold of Variability

If S&Gs are unreasonable or ineffective in meeting goals, or are not being implemented correctly.

Results and Evaluation

All plans of operation involving surface-disturbing operations were monitored throughout the mining season. Sporadic and weekend assessment operations were monitored at least once. There were no cases reported in which resource objectives were not met based on this monitoring.

Another level of monitoring includes S&G implementation monitoring as described in monitoring item 2. Implementation of all S&Gs are reviewed. This level of monitoring continues to show that there are several S&Gs that cannot be met in the short term during placer mining operations. These standards include:

- Limiting detrimental soil conditions.
- Maintaining riparian and streamside vegetation.
- Giving preferential considerations to riparian dependent species.
- Maintaining biological diversity at the micro scale.
- Maintaining old-growth qualities, including solitude.

Although these S&Gs may not be met in the short term, data is lacking to address whether resource objectives are being met. Reclamation plans are developed with the objective of meeting resource goals in the long term.

Concerns have been expressed about not having sufficient people to provide adequate input from resource specialists in the planning process.

There appear to be conflicts between certain S&Gs and allowing reasonable mining operations under the mining law.

Action to be Taken

Continue to monitor.

The concerns about being able to meet S&Gs in the short term while allowing reasonable mining operations have been submitted to the Regional Forester as a potential issue to be considered in a Forest Plan adjustment. Further evaluation will be conducted in support of the Forest Plan adjustment process. The adjustment process is currently on hold until the ICBEMP and EIS are completed.

Monitoring Item 39
Wilderness

Goal

Manage wilderness areas in accordance with the values specified in the Wilderness Act of 1964 and the Oregon Wilderness Act of 1984.

Purpose of Monitoring

To determine if wildernesses are being managed in accordance with the Wilderness Act (P.L. 88-577) as amended.

To ascertain if wilderness use levels are within the limits established for each Wilderness Resource Spectrum class.

To summarize the physical/biological, managerial, and social setting of each Wilderness Resource Spectrum to assure their maintenance is consistent with the standards for wilderness management.

Threshold of Variability

Failure to implement Forest Plan standards and guidelines correctly.

Results and Evaluation

Physical/Biological

Air Quality: Air quality is assumed to be good to excellent.

Soils: Overall displacement and erosion of soils resulting from human activity are considered to be occurring at a rate that approximates natural processes except at trailheads, trails, administrative sites, and popular campsites located primarily around lakes. The natural ecological actions and reactions appear to be functioning appropriately for the wilderness resource. There appears to be no adverse off-site effects.

Water Quality: Water quality appears to be in good to excellent condition but there have been some reports of giardia. The natural ecological actions and reactions appear to be functioning appropriately for the wilderness resource. There appears to be no adverse off-site effects.

Vegetation: Examples of vegetative losses from human activities are documented in all wildernesses. The loss, or substantial reduction, of the natural process of fire has probably caused the greatest impact on the vegetative component of the wilderness resource. The natural ecological actions and reactions appear to be functioning freely in wilderness with the exception of fire. There appears to be no adverse off-site effects. The introduction and spread of noxious weeds and invasive plants continues to be a concern and is considered one of the most prominent threats to preservation of the wilderness resource.

Scenery: Scenery is generally thought to be excellent within each of the wilderness areas.

Livestock: Livestock grazing is permitted within all or portions of each wilderness, except the Baldy Unit of the North Fork John Day Wilderness. The Catherine Creek AMP for the Eagle Cap Wilderness portion was completed in 1996.

Fish and Wildlife: Elk populations in the Hells Canyon Wilderness are reported to be about 10 percent below the population index, while deer remain at 1995 levels. Upland bird numbers are up from 1995, but still below average populations. Natural distribution, numbers and interaction of the indigenous species are prevalent in Monument Rock Wilderness. In the North Fork John Day Wilderness, with the exception

of emergency fire rehabilitation measures taken after the Sloans Ridge Fire to protect bull trout habitat and water quality, natural ecological succession has been allowed to occur.

Evidence of Human Activity: Based on total acres, there is minimal evidence of human activity but it is present at the more popular sites.

Fire: Suppression action was taken on all reported fires.

Social

Based on field observations in the wildernesses it is reasonable to assume that all wildernesses except portions of the Eagle Cap Wilderness are within Region 6 standards. Group size is estimated to be within standards for all wildernesses. Because campsites are often clustered at popular destinations and some parties voluntarily camp within sight and sound of other groups, there are probably situations where Region 6 standards are not met. There appears to be better compliance with holding stock 200 feet away from lakes and water than for holding stock away from camping areas and out-of-sight of trails. No significant concerns have been identified concerning pets. 1996 data from Eagle Cap has not yet been analyzed.

Managerial

Wilderness education of groups, in person and through bulletin board messages, continues to have a positive effect on the wilderness resource. Partnerships with Eastern Oregon University, Blue Mountain Council of Boy Scouts, and NE Oregon Math and Science Teachers--were established to further the teaching of wilderness ethics. It appears that although the public has limited contact with trail crews and law enforcement officers, contacts made are having a beneficial effect.

Signing has been improved at some trailheads to address specific concerns and to provide better education. Funding did not allow for up to 50% of all wilderness trails to be maintained. Local service and user group maintenance of trails is increasing, but the backlog of trail maintenance continues to grow.

Wildernesses, for the most part, are being managed according to management direction and provisions of the Wilderness Act. The wilderness prescribed natural fire portion of the Fire Management Action Plan (Chap. 40) have been completed for all wildernesses on the Forest. WRS (wilderness resource spectrum) standards appear to be met in most cases.

Action to be Taken

Continue to monitor. Complete wilderness boundary marking and management plans for each wilderness, as outlined in the implementation schedules. Continue implementation of the Eagle Cap Wilderness Stewardship Plan. Complete and implement Minam II Management-Ignited Fire Project. Continue efforts to monitor and control invasion of noxious weeds.

Monitoring Item 40
Wild and Scenic Rivers

Goal

To protect and enhance the values for which each wild and scenic river was designated, including the identified ORVs (outstanding remarkable values), free flowing condition, and water quality. Also, to protect and to the extent practicable, enhance ORVs on rivers under study for inclusion into the national wild and scenic rivers system (Forest Plan study rivers).

Purpose of Monitoring

To determine if designated rivers and associated river corridors are being managed in accordance with the Wild and Scenic Rivers Act. Also, to ensure that Forest Plan study rivers are managed so as not to jeopardize their potential eligibility, classification, or suitability for inclusion in the national wild and scenic rivers system.

Threshold of Variability

If there is a failure to meet the law or direction in the Forest Plan or River Management Plans.

Results and Evaluation

Wild and scenic river conditions have not been adversely affected by management activities. Natural processes are dominating. Monitoring results validate that designated river classifications of wild and recreational river corridors are being maintained to appropriate classification standards.

Wildlife and fisheries inventories were completed for the **Lostine River**, and monitoring of water temperatures and listed sensitive plants was conducted within this corridor. Results from water temperature and sedimentation surveys conducted on the **Imnaha River** are not yet available. No mining or recreational dredging activities have been observed in the W&S **Minam River**. Water quality and flow data is being collected downstream of the wild and scenic river corridor at the confluence of the **Minam** and **Wallowa Rivers**. Results are not yet available. In a programmatic review, it was determined that S&Gs for the **Snake River** were adequately addressed in the NEPA document, and that project implementation generally exceeded standards. The relationship between range development/impacts and the WSR values will be addressed in the final CMP for the HCNRA. Management activities to restore dispersed camping sites in the W&S **Eagle Creek** corridor have enhanced the recreation values. Recreation use has been monitored through the wilderness entry permit system but the data collected has not yet been analyzed. Illegal prospecting continues to be a problem in the **North Fork John Day** corridor.

Action to be Taken

Continue to monitor. Complete final HCNRA CMP. Continue to find alternate sources of funding and develop new partnerships to fully implement the wild and scenic river plans. Increase law enforcement in North Fork John Day in order to curtail illegal mining activities.

Monitoring Item 41
Recreation Setting

Goal

Maintain a semi-primitive social and physical setting showing little or no evidence of human activity and meeting the needs of people seeking a place where there is little interaction with other users.

Encourage, establish, and sustain a diverse, balanced, and stable range of recreation services and facilities on the Forest.

Purpose of Monitoring

To determine whether Forest settings with desirable recreation attributes are being managed to provide high quality and stable opportunities for outdoor recreation.

To monitor recreation developments in order to ensure that they are maintained to a standard that provides for customer satisfaction.

To provide assurance that physical, social, and managerial attributes are maintained at levels identified in the S&Gs.

Threshold of Variability

If there is a failure to meet S&Gs for high quality recreation opportunities within each ROS (recreation opportunity spectrum) class.

Results and Evaluation

Overall, the results of monitoring are acceptable. The Forest appears to be providing a wide range of recreation opportunities to the general satisfaction of users. Use of the Forest by recreationists is growing; however, the positive comment most often heard continues to be that visitors appreciate the solitude provided by the Forest's sites and facilities. S&Gs are being met, but services at developed sites, including water and garbage pickup, are reduced due to budget deficiencies. Use by mentally or physically challenged visitors, particularly the elderly, appears to be increasing, but slowly. Specific funding for accessibility has not been available; however, recreation specialists are making improvements to the extent they can with regularly appropriated funding.

Rating of quality of sites averaged four on a scale of one (low) to five (high). Most positive comments centered on Forest Service contacts, primitiveness of the area, lack of crowds, scenery, and wildlife. Negative comments related to road closures, firewood restrictions, not enough ATV trails, lack of trail maintenance, lack of horse camps, and horse manure in the campground. One area of interest that appears to be growing is support for more Forest Service emphasis on winter recreation and associated facilities.

Many of the recreation facilities on the Forest are located along streams. Forest specialists are working to mitigate conflicts where necessary and providing a more appropriate level of visitor education about anadromous fish protection.

Action to be Taken

Continue to monitor.

Monitoring Item 42
Off-Road Vehicle Use

Goal

Manage off-road vehicle use to provide for recreation opportunity in a manner consistent with other resource management objectives.

Purpose of Monitoring

To see if Forest settings with desirable recreation attributes are being managed to provide high quality and stable opportunities for off-road vehicle use.

To determine if there are conflicts with other recreation or other resource management objectives.

Threshold of Variability

If there is a failure to meet standards and guidelines.

Results and Evaluation

Off-road vehicle use is occurring at various levels and in various ways across the Forest. Off-road vehicle use is slowly increasing, but management of the use is meeting the intent of S&Gs. ATV (all-terrain vehicle) use is primarily meeting the intent of the S&Gs, but as use increases so do concerns about effects on other resources, including wildlife and heritage. These concerns will be taken into account during the Forest Travel Management Plan process. The engineering units are monitoring for vehicle traffic on closed roads.

Users sometimes stray onto closed trails entering the Eagle Cap Wilderness, and into the Wilderness itself. In cases where trails leading into the Wilderness are not closed outside the Wilderness boundary, conflicts with horse users heading for the Wilderness may occur.

Although no formal monitoring by the agency has occurred in the lower Imnaha, wildlife specialists are concerned that the potential for disturbance of bighorn sheep by ATV use in the area may exist. Monitoring by other agencies, including ODFW, is taking place, but no results have been reported.

There is evidence that road closures are being breeched on Baker RD and adversely affecting long-term soil productivity and water quality in very localized areas not exceeding 1% of the District land base. A road closure has been imposed to protect specific cultural sites.

In areas of uncontrolled use on the La Grande RD, some water quality degradation is occurring. La Grande and Unity RDs are working with State of Oregon's All Terrain Vehicle Committee and local ATV clubs to design and establish designated ATV trail systems.

Action to be Taken

Continue to monitor. Address concerns in the update to the Forest Travel Management Plan. Continue efforts being undertaken on several of the units to provide high quality OHV opportunities in a designated and controlled setting.

Monitoring Item 43
Visual Resource Objectives

Goal

Manage all National Forest lands to obtain the highest possible visual quality, commensurate with other appropriate public uses, costs, and benefits.

Purpose of Monitoring

To determine if visual resource objectives for treated acres and created opening size are being met.

Threshold of Variability

If visual resources fail to meet standards and guidelines.

Results and Evaluation

No unit reported any project/activities within which Forest standards for VQOs (visual quality objectives) were not met.

Problems, however, are increasing within the Imnaha corridor, where harvest treatments have historically been limited to hazard tree removal along Forest Service Road 3960. Consequently, at this date, stand densities continue to increase, as do fuels, and the open park-like stands are being threatened by encroachment of small fir and spruce trees.

A plan, the Upper Imnaha Fire Reintroduction Project, has been prepared to remedy the situation, and it is presently being analyzed. Its goals are to maintain the open ponderosa pine stands and the mosaic patterns of vegetation while reducing stand densities and fuels, and reintroducing fire as a management tool. Implementation of this plan to meet landscape character goals is needed.

Based on visual resource monitoring, VQOs appear to be an important and recognized part of project planning on the Forest. Progress is being made in completing viewshed management plans for Level I corridors, with about 40% of the 42 Level I viewsheds having completed plans.

Action to be Taken

Continue to monitor. Continue to complete Level I viewshed plans. Implement the Upper Imnaha Fire Reintroduction Project.

Monitoring Item 45
Budget

Goal

Provide for full funding of all resource programs and activities including monitoring.

Purpose of Monitoring

To determine whether annual Forest programs and budgets are adequate to fully implement the Forest Plan.

Results and Evaluation

In the following table, the column entitled **Forest Plan 10 Year Total** displays the estimated cost of implementing the Forest Plan for the first decade based on 1982 assumptions and operating procedures.

The **Planned Program Budget for 1996** was developed in 1993 to reflect a projected annual cost of implementing the Forest Plan for 1996. Actual allocations from the Regional Forester, based upon appropriations from Congress, are shown under **Actual 1996 Budget.** The final two columns show what percent of the planned program budget was funded, first for 1996 and then cumulatively since 1992. All figures are in 1996 dollars.

Forest Program Budgets
Forest Plan Projected Program Budget and Actual Budget, 1991-1996
(1996 M$)

Program Area	Forest Plan 10-Year Total	Planned Program Budget for 1996	Actual 1996 Budget	Actual as a % of Planned Program	Cumulative for Decade since Plan Approval (%)
National Forest System Appropriations:					
Minerals Area Mgmt	1,960	318	487	153	120
Real Estate Mgmt	2,242	131	[1]290	221	110
Landline Location	4,480	215	114	53	52
Facilities Mtce	3,720	508	437	86	58
Coop Law Enforcement	0	21	62	295	80
Road Mtce	13,450	1,261	1,261	100	73
Trail Mtce	3,140	[2]0	[2]0	[2]0	[2]NA
Tbr Sale Admin/Mgmt	41,250	1,942	1,457	75	88
Reforestation & TSI	25,480	1,974	2,504	127	90
Recreation/Wilderness	17,710	2,160	1,899	88	84
Wildlife & Fish	6,160	1,070	720	67	61
Range Mgmt	11,330	950	1,002	105	62
Soil/Water/Air Mgmt	4,370	577	226	39	70
Heritage Resources	2,330	143	99	69	60
Ecosystem Planning	0	864	1,110	[3]128	[3]128
General Administration	30,680	1,994	2,049	103	76
Total N.F. System	**$168,470**	**$14,129**	**$13,717**	**97%**	**79%**

Program Area	Forest Plan 10-Year Total	Planned Program Budget for 1996	Actual 1996 Budget	Actual as a % of Planned Program	Cumulative for Decade since Plan Approval (%)
Construction:					
Facilities	440	0	8	0	0
Recreation	800	0	214	NA	101
Forest Road	47,490	1,072	1,186	111	39
Trails	1,570	0	24	NA	44
Total Construction	**$50,030**	**$1,072**	**$1,432**	**134%**	**47%**
Other Funds:					
Forest Fire Protection	26,630	3,734	3,918	105	91
Land Acquisition	910	31	72	232	96
Range Betterment Fund	1,270	0	97	NA	127
Brush Disposal	6,000	197	318	161	93
Tbr Purch Rd Construct	56,590	504	0	NA	14
Timber Salvage Sales	2,720	1,005	4,159	414	192
K-V Ref/TSI/Other	31,220	508	3,424	674	104
CWFS-Other	5,950	118	397	336	94
State & Private	0	180	206	114	NA
Total Other Funds	**$131,290**	**$6,277**	**$12,591**	**200%**	**[4]108%**
TOTAL	**$350,070**	**$21,478**	**$27,740**	**129%**	**[4]82%**

[1] Although the planned program budget for FY96 was submitted for the Wallowa-Whitman only, money for the Wallowa-Whitman, Umatilla, and Malheur National Forests was allocated to the Wallowa-Whitman for a zoned team who does work on all three Forests.

[2] Trail maintenance funds are included in the recreation/wilderness budget.

[3] Funding for ecosystem management was not a budget line item prior to FY95 so was not requested as an individual project program. FY96 was the first year comparison between programmed and allocated could be made.

[4] Because of inconsistencies in the budget process from year to year, the percentages comparing allocations to program plans for "Other Funds" does not reveal a meaningful pattern. With the exception of Fire Protection, Land Acquisition, and State & Private, "Other Funds" are not a direct appropriation from Congress; some of them are spending limitations rather than an allocation of funds.

Action to be Taken

Further evaluate updated budget information in support of the Forest Plan adjustment process. The adjustment process is currently on hold until the ICBEMP and EIS are complete.

Monitoring Item 46
Costs and Values

Goal

Verify that projected costs and values approximate actual costs and values.

Purpose of Monitoring

To determine if stumpage values are approximately as projected.

Threshold of Variability

The rolling two-year average stumpage value increases to at least 25% above the projected level used in the Forest Plan.

Results and Evaluation

This monitoring element was derived from the concern that 62,000 acres of forested land, which would otherwise not be available for harvest, is not scheduled for harvest due to economic considerations. If, during the life of the Forest Plan, the rolling two-year average stumpage value increases to at least 25% above the projected level used in developing the Forest Plan, approximately 5 mmbf (million board feet) will be offered for sale annually from these lands as a noninterchangeable component of the ASQ. Lands within the HCNRA are not to be considered in providing this additional volume.

Of the area identified, approximately 26,000 acres contain trees that are merchantable. Lodgepole pine fiber opportunity (small diameter material for chipping) on areas accessible by cable or helicopter logging systems account for 16,000 acres. An additional 8,500 acres contain the true fir types identified for "multitreat" (generally low volume per acre), on areas accessible by long span cable or helicopter logging systems. The remaining 1,500 acres are identified as lodgepole pine in areas accessible by long span cable or helicopter logging systems.

In the development of the Forest Plan, the decadal future stumpage value used for sawtimber was $174/mbf (1996 constant dollars). The following table compares the sawtimber outputs and values for 1995 and 1996 against Forest Plan projections. The rolling two-year average for stumpage values of sawtimber sold shows a 7.8% decrease over Forest Plan projections, which does not exceed the designated threshold of variability of a 25% increase.

Sawtimber Outputs and Values

	Forest Plan Projections	1995	1996
Sawtimber Sold - mmbf	141	10.4	42.2
Total value of sawtimber sold (1996 millions of dollars)	$25	$2.0	$5.5
Average value of sawtimber sold (1996 $/mbf)	$174	$191	$129
Percent change in sawtimber value (1996 $/mbf) of sold volume compared with Forest Plan projections	NA	+9.8%	-26%

Note: The figures for "Sawtimber Sold" is the figure for which associated values can be determined. This figure does not match the volume sold as identified in monitoring item 4.

Action to be Taken

Continue to monitor.

Purpose of Monitoring

To determine whether or not the major costs and values used in the Forest Plan analysis are in line with actual implementation costs and values.

Threshold of Variability

If costs and values are plus or minus 25%.

Results and Evaluation

The projected output of Forest-related goods and services, as determined in the Forest Plan, is predicated on a number of assumptions. One important set of assumptions are those which address the value or cost of outputs and services. Changes in actual costs and values from those projected in the Forest Plan may indicate the need to re-evaluate land-use allocations and the quantity and mix of goods and services derived from the use of National Forest land. This section will address costs and values in three categories: (1) Forest expenditures; (2) commercial timber revenues and costs; and (3) recreation values. While these categories do not cover all costs and values of potential importance in the Forest planning process, they do give a broad overview of recent trends and allow a comparison with a number of the major costs and values used in the Forest Plan analysis.

Forest Expenditures: The following table compares projected expenditures to actual expenditures. The Forest Plan projected first decade expenditures to average $33,579,100 per year (all dollar values are in 1996 constant dollars). Actual annual expenditures for the same activity categories for the period 1994 to 1996 averaged $43,183,600 which represents a 28.6% increase over Forest Plan projected expenditures.

Recreation, wildlife and fish programs, and water resources accounted for the highest increases in comparing actual expenditures to projected expenditures. Increases are as follows: recreation, 117%; wildlife and fish, 130%; water resources, 135%; mining and geology, 112%; timber, 8%; wilderness, 62%;

and range 4%. Fire protection increased the most, 427%, due to the wildfires that occurred on the Forest in 1994 and 1996. Actual expenditures for facilities were 64% lower than projected. Lands expenditures were 30% less than projected and general administration was 4% less than projected.

Aside from total expenditures in a given category, activity expenditures as a percentage of the total yearly expenditures give an indication of changes in program emphasis. The proportion of recreation, water resources, wildlife and fish, and mining/geology program expenditures to total yearly expenditures during the period 1994-96 are about double the projected proportions. Timber expenditures during the period 1994-1996 have averaged 27% of yearly expenditures. This compares with 26.8% projected in the Forest Plan. Facilities expenditures as a percentage of total annual expenditures averaged 14.6% for the last three years. This compares with the Forest Plan projection of 39.2%. Fire protection expenditures accounted for 17.9% of the average yearly expenditures primarily due to the wildfire suppression efforts during 1994 and 1996 compared to 9% projected in the Forest Plan.

Forest Expenditures: Forest Plan Projections and Actual Expenditures[1], 1994-96

Activities	Forest Plan Projected Expenditures $M/year (1996 $)	Activity as % of total yearly expenditures	1994-96 average yearly expenditures, $M/year (1996 $)	Activity as % of total yearly expenditures	Percent change from Forest Plan Projections [2]
Recreation	$1,428	4.3%	$3,104	117%	+117%
Wilderness	$298	0.9%	$482	1.8%	+62%
Wildlife and Fish	$575	1.7%	$1,319	4.1%	+130%
Range	$1,212	3.6%	$1,259	4.1%	+4%
Timber	$9,010	26.8%	$9,749	27.4%	+8%
Water Resources	$267	0.8%	$626	1.9%	+135%
Mining and Geology	$181	0.5%	$383	1.2%	+112%
Lands	$1,112	3.3%	$779	2.9%	-30%
Facilities	$13,178	39.2%	$4,630	14.7%	-65%
Fire Protection	$3,160	9.4%	$16,662	17.9%	+427%
General Administration	$3,159	9.4%	$3,032	9.0%	-4%
Ecosystem Management	NA	NA	$1,160	4.4%	NA
Total yearly expenditures [3]	**$33,579**	**100%**	**$43,184**	**100%**	**+28.6%**

1. Expenditures for FY 1994-96 are from **Summary by Operating Plans and Expenditures**, Budget and Accounting, NFH.

2. In terms of annual expenditures.

3. Total yearly expenditures are for shown activities only, not total Forest expenditures.

Commercial Timber Revenue and Costs: The next table compares Forest Plan projections of commercial timber outputs, revenue, and costs to actual totals for the period 1994-96. The general trend since the mid-1980s has been characterized by decreasing revenue and increasing costs per mbf (thousand board feet) of harvested timber. Due to changes in accounting codes and expenditure tracking, the projected cost per mbf in the Forest Plan may not be exactly comparable with the costs obtained from TSPIRS (Timber Sale Program Information Reporting System).

The average cost per mbf of harvested commercial timber was $236 for the period 1994-96. This represents a 354% increase in costs over Forest Plan projections. Average revenue per mbf during the period 1994-96 was $158. This is 16% over that projected by the Forest Plan.

Commercial Timber Output, Revenue, and Costs[1]

Fiscal Year	Harvested Volume (mmbf)	Revenue[2] (mm$)	Average revenue per mbf (1996 $)	Average cost per mbf (1996 $)
1996	11.2	$1.4	$125	$235[3]
1995	12.4	$2.3	$187	$275[3]
1994	31.2	$4.9	$163	$196[3]
Forest Plan	185[4]	$16.0	$137	$52[5]

1. Commercial timber data from Timber Sale Program Information and Reporting System (TSPIRS), Statement of Timber Sale Revenues and Expenses, Wallowa-Whitman National Forest, 1994, 1995, 1996.

2. Total commercial revenue (nominal dollars), TSPIRS Statement of Timber Sale Revenues and Expenses for specified year.

3. Total direct expenses, TSPIRS Statement of Timber Sale Revenue and Expenses for specified years.

4. Includes sawtimber and roundwood annual harvest totals for the first decade.

5. Derived from Management Information Handbook activity codes for timber. Due to changes in accounting codes and expenditure tracking, may not be directly comparable to above cost figures.

Recreation Values: Recreation values represent the estimated market price of the specified recreation activity in terms of recreation visitor days or wildlife and fish user days (see accompanying table for definitions). The values used in the Forest Plan analysis can be compared with the most recent agency approved values from the 1990 RPA (Forest and Rangeland Resources Planning Act of 1974) in Table IV-9.

For the listed activities, the 1990 RPA figures are on average 57 percent higher than the values used in the Forest Plan analysis (1996 constant dollars). Cold water and anadromous fishing are 365% and 98% higher, respectively. Small game, waterfowl, and upland game hunting are higher by 100%, 69%, and 77%, respectively. Big game hunting decreased by 5%.

Comparison of Recreation Values used in Forest Plan and Recent Estimates

Activity	Value used in Forest Plan Analysis[1] (1996$ per RVD or WFUD[2])	1990 RPA Values[3] (1996$ per RVD or WFUD)[2]	Percent Change
Fishing:			
Anadromous	$47	$93	+98%
Cold water	$20	$93	+365%
Hunting:			
Big game	$44	$42	-5%
Small game	$19	$38	+100%
Waterfowl	$35	$59	+69%
Upland game	$35	$62	+77%
Boating:			
Motorized	$6	$6	0%
Non-motorized	$9	$9	0%
Other:			
Motorized travel	$11	$11	0%
Camping	$11	$9	-18%
Picnicking	$6	$9	+50%
Hiking	$14	$13	-7%
Wilderness	$19	$26	+37%
Wildlife viewing	$39	$47	+21%

1. The values used in the Forest Plan analysis are based on values developed in the **FEIS for the 1985-2030 Resources Planning Act Program.** October 1986. See Appendix F, **Development of Benefit Values and Costs**, PP. F-1 to F-16.

2. RVDs are Recreation Visitor Days, which equals one person engaged in the specified activity for 12 hours. WFUD's are Wildlife-Fish User Day's which is a similar concept to recreation visitor days except applied to hunting and fishing activities.

3. Source: **Resource Pricing and Valuation Procedures for the Recommended 1990 RPA Program**, Appendix B in **The Forest Service Program for Forest and Rangeland Resources**: May 1990.

Each criteria is beyond the 25% established threshold.

Action to be Taken

The changed costs and values are an integral part of several concerns that have been submitted to the Regional Forester as potential issues to be considered in a Forest Plan adjustment. Data will be further evaluated in the Forest Plan adjustment process. The new cost and values will be used in the modeling and decisions for the Forest Plan adjustment. The adjustment process is currently on hold until the ICBEMP Scientific Assessment and Draft EIS are completed.

Monitoring Item 47
Community Effects

Goal

Verify that projected economic and social effects are in line with actual effects.

Purpose of Monitoring

To determine if Forest-related jobs and personal income are approximately as projected in the Forest Plan.

Threshold of Variability

If changes in community effects are plus or minus 15% from those projected.

Results and Evaluation

Forest-related jobs are primarily associated with four activities: (1) harvesting and processing of sawtimber; (2) harvesting and processing of other types of timber such as roundwood and fuelwood; (3) livestock grazing; and (4) recreation use, including both developed and dispersed recreation. The first table shows jobs per year associated with the specified activities. The Forest Plan projected a total of 2,973 Forest-related jobs per year for the first decade.

Based on the three-year average from 1994-96, estimated Forest-related employment has been 9% less than what was projected in the Forest Plan. The largest decrease has occurred in employment related to sawtimber and roundwood harvesting and processing. Estimated employment is 61% and 86% less, respectively, than projected in the Forest Plan. Based on the three-year average, recreation-related employment is 24% more than projected in the Forest Plan. Employment associated with livestock grazing and production is 10% less than projected.

Jobs Related to Selected Forest Activities[1] (jobs per year)[2]

Activity	Forest Plan[3]	1994	1995	1996	3 year average (1994-96)	Percent change from Forest Plan
Sawtimber	894	488	230	329	349	-61%
Roundwood	179	17	22	38	26	-86%
Livestock	93	95	85	72	84	-10%
Recreation	1,807	2,197	2,241	2,286	2,241	+24%
Totals	**2,973**	**2,797**	**2,578**	**2,724**	**2,700**	**-9%**

1. Estimated jobs associated with sawtimber production, roundwood production, livestock grazing and recreation use for the Forest Influence Zone (Appendix B, Forest Plan FEIS, p. B-66).

2. See Appendix B, Forest Plan FEIS, pp. B-74 to B-85 for discussion of methodology used to estimate job effects. Timber response coefficients are from updates for TSPIRS, 1994.

3. Forest Plan FEIS, Table IV-28, p. IV-84, Alternative C (preferred).

Personal income derived from Forest-related jobs was lower than Forest Plan projections. The Forest Plan projected annual personal income of $69 million from Forest-related jobs. Based on the job estimates discussed above, personal income average during the period 1994-96 was 19% lower than projected in the Forest Plan. Sawtimber harvesting and processing accounted for the largest differences from those projected in the Forest Plan, generating 64% and 88% less personal income than projected. Recreation contributed 27% more personal income than projected in the Forest Plan. Range contributed 15% less personal income than projected in the Forest Plan.

Personal Income Derived from Forest-related Activities[1] [2] (1996 $MM)

Activity	Forest Plan[3]	1994	1995	1996	3 year average (1994-96)	Percent change from Forest Plan
Sawtimber	26.4	13.3	6.3	9.0	13.2	-64%
Roundwood	5.7	0.5	0.6	1.0	0.5	-88%
Livestock	1.7	1.7	1.5	1.3	1.6	-15%
Recreation	35	43.5	44.3	45.2	43	+27%
Totals	**69**	**58.9**	**52.7**	**56.5**	**58.3**	**-19%**

1. Estimated personal income associated with sawtimber production, roundwood production, livestock grazing and recreation use for the Forest Influence Zone (Appendix B, Forest Plan FEIS, p. B-66).

2. See Appendix B, Forest Plan FEIS, pp. B-74 to B-85 for discussion of methodology used to estimate personal income effects. Timber response coefficients are from updates for TSPIRS, 1994.

3. Forest Plan FEIS, Table IV-28, p. IV-84, Alternative C (preferred).

The difference between recent job and personal income estimates and Forest Plan estimates is primarily the result of decreased timber harvesting from Forest Plan projections, more recent information, and more realistic modeling assumptions. Forest Plan estimates generated $181,806 (1996 constant dollars) of personal income per one million board-feet of sawtimber harvested. In 1996, this estimate increased to $363,650 (1996$), a 100% increase over the Forest Plan projected value.

These results are beyond the established threshold.

Action to be Taken

The data will be further analyzed and used in the Forest Plan adjustment process. The adjustment process is currently on hold until the ICBEMP Scientific Assessment and Draft EIS are completed.

Purpose of Monitoring

To determine if local population trends are approximately as projected.

Threshold of Variability

If local population changes are plus or minus 15% from those projected.

Results and Evaluation

The following table compares area population over time. The tri-county area (Baker, Union, and Wallowa Counties) lost population during the 1980s. Since 1990, however, the area population has increased by 5.4%. The Forest Plan FEIS estimated the tri-county population to be approximately 50,794 in the year 2000. The 1996 tri-county population is 48,250, 5% below the projected population by 2000. This is within the +/- 15% threshold of variability established in the Forest Plan.

Area Population

	1980	1990	Percent Change 1980-90	1996	Percent Change 1990-96
Baker County	16,134	15,300	-5.2%	16,500	+7.8%
Union County	23,921	23,600	-1.3%	24,500	+3.8%
Wallowa County	7,273	6,900	-5.1%	7,250	+5.1%
Tri-County Area	47,328	45,800	-3.2%	48,250	+5.4%
Oregon	2,633,149	2,842,300	+8%	3,181,000	+11.9%

Source: State of Oregon, Employment Department, Portland State University, Center for Population Research and Census, Portland, OR 1997.

Action to be Taken

Continue to monitor.

Purpose of Monitoring

To determine if payments to local governments are approximately as projected.

Threshold of Variability

If changes in payments are plus or minus 15% from those projected.

Results and Evaluation

The following table displays the payments to counties for the period 1994-1996 and also shows payments projected by the Forest Plan. Payments are 25% of Forest sales and use receipts from timber, land uses, recreation, power, minerals, and grazing. Receipts deposited for improvements on NFS (National Forest System) land from timber sale area improvement, the value of timber purchaser road construction, and salvage sale funds are also used as a basis for payment.

Study of these sales and receipts shows the dominance of timber sale receipts in providing this source of income. Timber receipts are based on the actual amount of timber harvested. Additionally, payments to the counties are both proportional to the amount of NFS land in the county and based on the total revenue generated for the Forest as a whole (within a given state, with the Wallowa and Whitman National Forests considered separate entities for these calculations).

Payments to Counties
(Does not include Idaho portion of the HCNRA)

County	1994	1995	1996	3-year average (1996 $)	Forest Plan projected annual payments (1996 $)	Percent change
Baker	$934,637	$429,407	412,926	$607,336	NA	NA
Grant	$127,568	$58,609	56,285	$82,870	NA	NA
Malheur	$4,931	$2,265	2,176	$3,203	NA	NA
Umatilla	$40,185	$18,463	17,738	$26,107	NA	NA
Union	$785,562	$361,138	347,894	$510,818	NA	NA
Wallowa	$128,775	$85,903	211,827	$144,415	NA	NA
Totals	**$2,021,658**	**$955,785**	**$1,048,846**	**$1,374,750**	**$6,755,306**	**-80%**

The decrease in timber harvesting (especially sawtimber) has resulted in a significant decrease in county payments. In comparison with the inflation adjusted Forest Plan projections, the three-year average (1994-1996) of total Forest payments to the indicated counties was 80% lower than projected. This exceeds the +/- 15% threshold of variability established in the Forest Plan.

Action to be Taken

The data will be further analyzed and used in the Forest Plan adjustment process. The adjustment process is currently on hold until the Interior Columbia Basin Ecosystem Management Project Scientific Assessment and Draft EIS are completed.

Purpose of Monitoring

To determine if changes in lifestyles, attitudes, beliefs, or values are occurring more quickly than expected, related to Forest activities, and adversely affecting local communities.

Threshold of Variability

If changes in lifestyles, attitudes, beliefs, or values are determined to be significant and adverse.

Results and Evaluation

With recent changes in social values and public perceptions concerning public land management, changes may occur faster than projected in the Forest Plan.

Action to be Taken

Continue to monitor.

Changes in social values and public perceptions will be addressed in the Forest Plan adjustment process. The adjustment process is currently on hold until the Interior Columbia Basin Ecosystem Management Project Scientific Assessment and Draft EIS are completed.

Monitoring Item 48
Adjacent Lands

Goal

Verify that adjacent lands are not adversely affected by National Forest activities.

Purpose of Monitoring

To determine whether planning assumptions, regarding effects on adjacent and nearby lands from Forest management activities, are correct.

Threshold of Variability

If any indication of significant adverse effects on local communities or adjacent lands are attributable to National Forest activities.

Results and Evaluation

As with previous years, coordination with adjacent landowners continues to be conducted through project scoping, in compliance with NEPA. Site-specific projects are considering the cumulative effects of off Forest activities relative to the proposed activity.

The results for this monitoring item is within the threshold of variability.

Action to be Taken

Continue to monitor.

Cumulative effects analysis of adjacent land activities will continue through watershed assessment processes, the ICBEMP, and future Forest Plan adjustments.

5. FOREST PLAN APPEALS AND AMENDMENTS

Forest Plan Appeals

The Chief of the Forest Service received sixteen appeals of the Regional Forester's April 1990 decision to implement the Wallowa-Whitman Forest Plan. In 1996, the Chief issued decisions on the remaining appeals. The Regional Forester's decision was affirmed on all appeal decisions. The appeals are available for review upon request.

Forest Plan Amendments

There were three amendments made to the Forest Plan in 1996.

Forest Plan Amendment 20 added direction to the Wild and Scenic Snake River Recreation Management Plan (Amendment 12) to proceed with implementation of proposed outfitter-guide use allocations and operational limitations.

Forest Plan Amendment 22 documents the selection of the preferred alternative for Dark Horn Salvage Sale Project on the La Grande Ranger District. This decision affects Regional Forester Amendment 3 (PACFISH) by treating riparian habitat conservation areas, requiring site-specific changes to the Forest Plan.

Forest Plan Amendment 23 documents the selection of the preferred alternative for Eagle Holcomb Timber Sale on the Pine Ranger District. This decision affects Regional Forester Amendment 2 by allowing harvest of trees greater than 21" dbh, requiring site-specific changes to the Forest Plan. As a result of administrative appeals, trees greater than 21" dbh were dropped from the sale.